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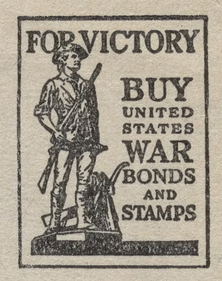
# UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH ADMINISTRATION

BUREAU OF PLANT INDUSTRY, SOILS, AND
AGRICULTURAL ENGINEERING




DIVISION OF
MYCOLOGY AND DISEASE SURVEY

BUREAU OF PLANT INDUSTRY STATION
BELTSVILLE, MARYLAND

October 19, 1945

To: F. R. Fosberg

From: J. A. Stevenson, Senior Mycologist in Charge
Mycology and Disease Survey

Subject: Identification of Collections by N. C. Fassett

I have named the following Fassett collections. The remainder of the series consists of lichens, which have been placed with our undetermined lichen collections against the happy day when we have a specialist in this group.

25116 Fusarium heterosporum Naes. on Setaria spikelets.
25278 Guepinia fissa Berk.
25280 Lachnocladium brasiliense Lev.
25292 Cora pavonia (WEb.) E. Fr.
25408 Dictyophora indusiata (Ventenat ex Pers.) Desv.
25570 Dictyonema irpicinum Mont.
25571 Dictyonema irpicinum Mont.
25572 Dictyonema irpicinum Mont.
25962 Chiodecton sanguineum (Sw.) Vainio

7 = delivered

6 copies for F.E.A.
>National arboretum
>E.P. Killip, Smithsonian
>F.R. Forberg
(filed in his personal folder)

# FOREIGN ECONOMIC ADMINISTRATION

## Colombian Cinchona Mission
## Plant Collection Number List

Harold St. John 1944

Note: Blank spaces in the list following full data indicate ditto marks or that the data is the same as for the previous entry. Common names are in quotes.

| Number | Name | Locality | Date |
|---|---|---|---|
| 20501 | Ruppia | Paiba, Boyacá | May 7, 1944 |
| 20502 | Solanum | Apulo, Rio Bogota, Cundinamarca | June 12, 1944 |
| 20503 | Ruellia tuberosa | | |
| 20504 | Ruellia obtusa | | |
| 20505 | Solanum crotonifolium | | |
| 20506 | Tournefortia hirsutissima | | |
| 20507 | Guazuma ulmifolia var. tomentosa | | |
| 20508 | Capparis odorotissima | Apulo, Rio Apulo, Cundinamarca | June 13, 1944 |
| 20509 | Casearia nitida | | |
| 20510 | Croton leptostachys | | |
| 20511 | Malpighia glabra | | |
| 20512 | Cassia | Ubaque, Cundinamarca, | June 17, 1944 |
| 20513 | Cassia | Choachí, Cundinamarca, | June 17, 1944. |
| 20514 | Cavendishia cordifolia | Páramo de Cruz Verde, 15 Km. S. of Bogotá, Cundinamarca | June 17, 1944 |
| 20515 | Macleania rupestris | | |
| 20516 | Carica candaramarcensis | Bogotá, Cundinamarca | June 22, 1944 |
| 20517 | Cuphea dipetala | 1 Km. N. of Sibaté, Cundinamarca | June 23, 1944 |
| 20518 | Monina | | |
| 20519 | Dodonaea viscosa | | |
| 20520 | Peperomia | | |
| 20521 | Lupinus | | |
| 20522 | Nertera granatensis | | |
| 20523 | Acanthaceae Besleria? | | |
| 20524 | Begonia magnifica | | |
| 20525 | Gunnera scabra | | |
| 20526 | Jamesonia | | |
| 20527 | Liabum | | |
| 20528 | Fuchsia | | |
| 20529 | Columnea | | |
| 20530 | Palicourea | on road, 15 Km. N. E. of Fusugasugá, Rio Subiaba, Cordillera Oriental, Cundinamarca | June 23, 1944 |
| 20531 | Palicourea | | |
| 20532 | Palicourea | | |
| 20533 | Ciparouna | | |
| 20534 | Carica candaramarcensis | Bogotá, Cundinamarca | June 24, 1944 |
| 20535 | Compositae | San Cristobal, Bogotá, Cundinamarca, | June 25, 1944. |
| 20536 | Stachytarpheta | 1 Km. N. of Cite, Cordillera Oriental, Santander | June 28, 1944. |
| 20537 | Melastomaceae | 13 Km. S. of Oiba, Cordillera Oriental Santander, | June 28, 1944 |

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FOREIGN ECONOMIC ADMINISTRATION

20538 Cassia — 18 Km. S. of Socorro, Cordillera Oriental, Santander, June 28, 1944

20539 Baccharis
20540 Vismia
20541 Myrsine
20542 Melastomaceae — 14 Km. S. of Socorro, Cordillera Oriental, Santander, June 28, 1944

20543 Compositae
20544 Leonotus — Pescadero, Rio Chicamocha, Cordillera Oriental, Santander, June 28, 1944.

20545 Tournefortia
20546 Tournefortia
20547 Moraceae
20548 Brickellia
20549 Adiantum — 3 Km. E. of Boca de Chucurí, Rio Sogamoso, Cordillera Oriental, Santander, June 29, 1944
20550 tree; lvs. alt.; fr. like acorn
20551 Psychotria
20552 Remijia pedunculata (with bark sample) — "Quina colorada", Filo de Lemir, La Putana, Cordillera de La Paz, Santander, July 6, 1944
20553 Remijia pedunculata — "Quina colorada" (with bark sample)
20554 Bromeliaceae — cascade of Quebrada Boquerona at confluence with Quebrada La Putana, Cordillera de La Paz, Santander, July 7, 1944.
20555 Isertia or Cassupa
20556 Rubiaceae
20557 Psychotria
20558 Lobeliaceae vine
20559 Gesneriaceae
20560 Palicourea
20561 Gentianaceae — W. side of Cordillera de La Paz, summit of Llana-Boquerona trail, Santander, July 7, 1944.
2 0562 tree lvs. opp. cor. — gam. Quebrada Llana, E. side Cordillera de La Paz, Santander, July 7, 1944.
20563 Cephaelis — near summit, W. side of Cordillera de La Paz, Quebrada Boquerona, Santander July 7, 1944.

20564 Sphagnum
20565 Acanthaceae
20566 Remijia pedunculata (with bark sample) — "Quinon" Finca Maravilla, Las Cruces, 3 Km. E. of San Vicente de Chucurí, Cuchilla del Ramo, Santander, H. St. John & Damaso Ramirez, July 5, 1944
2 0567 Remijia pedunculata (with bark sample) — "Quina roja" Alto de Consuelo, Cordillera de La Paz, Santander, H. St. John & Gustavo Arcila, July 19, 1944.
20568 Remijia pedunculata — "Quina roja" (with bark sample)
20569 Remijia pedunculata — "Quina roja" (with bark sample)
20570 Euphorbiaceae
20571 Ladenbergia — "Quinon"(with bark sample)
20572 Liliaceae — Filo Lorene, E. side of Cordillera de La Paz, Santander, H. St. John, July 20, 1944

20573 Pentagonia — Filo Lorene, E. side Cordillera e La Paz, Santander, H. St. John, July 20, 1944.

20574 Isertia or Cassupa (Bark sample) — Filo de Alto Viento, E. side Cordillera de La Paz, Santander, H. St. John & Gustavo Arcila, July 21, 1944

20575 Remijia pedunculata (Bark sample) — "Quina colorada" ridge between Filo de Alto Viento and Auebrada La Honda, E. side of Cordillera de La Paz, H. St. John & Gustavo Arcila, July 21, 1944

20576 Remijia pedunculata — "Quina colorada" (Bark sample)

20577 Palicourea — Filo de Alto Viento, E. side of Cordillera de La Paz, Santander, H. St. John July 21, 1944.

20578 Scrophulariaceae

20579 Cephaelis brachiata

20580 Gonzalagunia

20581 Rubiaceae

20582 Rubiaceae

20583 Psychotria

20584 Passiflora — Quebrada La [illegible] Llana, Nuevo Mundo, Cordillera Oriental, Santander July 25, 1944.

2 0585 Rubiaceae

20586 Gesneriaceae near Saint-Paulia

2 0587 Apocynaceae

20588 Vismia — "Manchador" Quebrada Angulo, 4 Km. S. of Lebrija, Cordillera Oriental, Santander, July 29, 1944

20589 Vismia

20590 Jussiaea

20591 Compositae Brickellia?

20592 Rubiaceae

20593 tree, superior ovary

20594 tree monoecious — "machanillo"

20595 Clusia — "gachi"

20596 Orchidaceae

20597 Separuna

20598 Melastomaceae

20599 Cephaelis

20600 Solanaceae

20601 Rubiaceae

2 0602 Piper — 4 Km. S. of Cantabria, Cordillera Oriental, Santander, July 29, 1944

20603 Solanum tree

20604 Melastomaceae shrub, páramo, 15 Km. W. of Berlin, Cordillera Oriental, Santander, July 30, 1944.

20605 Senecio

20606 Xyris

20607 Espeletia

20608 Begonia — páramo, 8 Km. E. of Berlin, Cordillera Oriental, Santander, July 30, 1944

20609 Calceolaria

20610 Viola

20611 Galium

20612 Gunnera

~~20613~~

20613 Lobeliaceae ~~subpáramo~~, subparamo, 5 Km. E. of ---- -
20614 Calycophyllum hirsutus "Quinon" ridge S. E. of Esmeralda, S.side of Rio Sogamoso, Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 2, 1944
20615 Remijia pedunculata "Quina blanca" (Bark sample)
20616 Remijia pedunculata "Quina blanca" (Bark sample)
20617 Remijia pedunculata "Quina blanca" (Bark sample)W. side of main ridge, Cordillera de La Paz, S. side of Rio Sogamoso, Santander, H. St. John & G. Arcila July 2, 1944.
20618 Remijia pedunculata "Quina blanca" (Bark sample)
20619 Remijia pedunculata "Quina blanca" (Bark sample) N. W. end of Cordillera de La Paz, S. of Rio Sogamoso, Santander, H. St. John & G. Arcila Aug. 2, 1944
20620 Remijia pedunculata "Quina blanca" (Bark sample)
20621 Remijia pedunculata "Quina blanca" (Bark sample) W. side of N. end of Cordillera de La Paz, S. side of Rio Sogamoso, S. E. of Esmeralda, Santander, H. St. John & G. Arcila, Aug. 3, 1944.
20622 Remijia pedunculata mass collection of sterile branches of 20621
20623 Remijia pedunculata mass collection of flowers of 20621
20624 Remijia pedunculata mass collection of fruit of 20621
20625 Remijia pedunculata "Quina blanca" (Bark sample)
20626 Remijia pedunculata "Quina blanca" (Bark sample)
20627 Remijia pedunculata "Quina blanca" (Bark sample) Filo San Pablo, S. end of N. part of Cordillera de La Paz, E. of Esmeralda, Santander, H. St. John & G. Arcila, Aug. 4, 1944
20628 Remijia pedunculata "Quina blanca" (Bark sample)
20629 Remijia pedunculata "Quina blanca" (Bark sample)
20630 Remijia pedunculata "Quina blanca " (Bark sample)
20631 Leguminosae tree red fl; "Arisá"
20632 ~~20631~~ Passiflora "Granada"
20633 Remijia pedunculata "Quina" (Bark sample) W. side of Cerro de Santa Barbara, Quebrada Caimana, drainage of Rio Sucio, N. half of Cordillera de La Paz, H. St. John & G. Arcila, Santander, Aug. 12, 1944
20634 Remijia pedunculata "Quina tuna" (Bark sample) W. side of Cerro Arenosa, Quebrada Arenosa, drainage of Rio Sucio, N. half of Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 14, 1944
20635 Ladenbergia "Quina tuna" (Bark sample)
20636 Ladenbergia "Quina tuna" (Bark sample)
20637 Remijia pedunculata "Quina tuna" (Bark sample)
20638 Remijia pedunculata "Quina tuna" Quebrada Caimana, drainage of Rio Sucio, W. side of N. half of Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 15, 1944.
20639 Remijia pedunculata "Quina tuna" (Bark sample) W. side Alto Frio, W. of Naranjo, Cordillera de La Paz, Santander, H. St. John & G. Arcila, Aug. 15, 1944.
20640 Remijia pedunculata "Quina tuna" (Bark sample)

FOREIGN ECONOMIC ADMINISTRATION

20641 Calycophyllum "Quinon" (Bark sample) Quebrada Caimana, drainage of Rio Sucio, W. side of N. half of Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 16, 1944

20642 Remijia pedunculata "Punta de lanza" (Bark sample) Filo San Carlos, N. end of N. half of Cordillera de La Paz, 5 Km. S. of El Volador, Santander, H. St. John & G. Arcila Aug. 17, 1944.

20643 Remijia pedunculata "Punta de lanza" (Bark sample)

20644 Remijia pedunculata "Punta de lanza" (Bark sample)

20645 Cattleya Arenal, Chicamocha Valley, Cordillera Oriental, Santander, H. St. John Aug. 19, 1944.

20646 Cattleya

20647 Rubiaceae Quebrada El Pato, El Cidro, Rio Pómera, 11 Km. E. of Moniquirá, Cordillera Oriental, Boyaca, Aug. 20, 1944

20648 Solanum

20649 Solanaceae

20650 Galinsoga

20651 Rubiaceae

20652 Palicourea

20653 Piper

20654 Compositae

20655 Solanum

20656 Solanum

20657 Rubiaceae

20658 Ericaceae

20659 Rubiaceae

20660 Cucurbitaceae

20661 Bomarea

20662 Araceae

20663 Begonia

20664 Liliaceae? "Guiche"

~~20665~~

2 0670 Ericaceae "Uva" valley of Rio Pómera, 13 Km. E. of Moniquirá, Cordillera Oriental, Boyacá, Aug. 20, 1944

20671 Ilysanthes La Cumbre, 14 Km. N. W. of Arcabuco, Rio Pómera, Cordillera Oriental, Boyacá, Aug. 20, 1944

20672 Orchidaceae

20673 Bignoniaceae canyon of Rio Pómera, 13 Km. N. W. of Arcabuco, Cordillera Oriental, Boyacá, Aug. 20, 1944

20674 Habenaria

20675 Compositae shrub

20676 Leguminosae, vine black buds

20677 Bromeliaceae

20678 Solanum 12 K. N. W. of

20678 Gentianaceae, shrub fl. yellow) specimen to be destroyed

20679 Zygophyllaceae ?

20680 Thalictrum podocarpum male 8 Km. N. W. of

20681 Thalictrum podocarpum female

20682 Potamogeton

FOREIGN ECONOMIC ADMINISTRATION

20683 Galinsoga parviflora 4 Km. S. of Cota, Bogotá Sabana, Cundinamarca, Aug. 27, 1944

20684 Galinsoga
20685 Compositae
20686 Capparis
20687 Galinsoga caracasana 4 Km. S. of Cota, Bogotá Sabana, Cundinamarca, Aug. 27, 1944.

20688 Galinsoga
20689 Hedyotis 2 Km. N. of Combita, Valley of Rio Grande, Cordillera Oriental, Boyacá, Sept. 1, 1944.

20690 Vernonia ?
20691 Ericaceae
20692 Lycopodium
20693 Vicia
20694 Halenia
20695 Hypericum
20696 Castilleja
20697 Antennaria
20698 Orthosanthes chimboracensis
20699 Orthocarpus
20700 Orchidaceae
20701 Ageratum ?
20702 Ranunculus
20703 Poa
20704 Compositae
20705 Vallea?
20706 Rubus
20707 Acaena
20708 Labiatae
20709 Hypericum
20710 Hypericum
20711 Ericaceae
20712 Ericaceae
20713 Compositae Actinea ?
20714 Compositae yellow
20715 Erigeron
20716 Myrsine
20717 Croton Canyon of Rio Chicamocha, opposite Pescadero, Cordillera Oriental, Santander, Sept. 1, 1944.

20718 Verbenaceae
20719 Solanum
20720 Funastrum pubescens
20721 Amphilophium near paniculatum
20722 Salvia near bogotensis
20723 Calotropis procera
20724 Cuscuta Matanza, Rio Surata, Cordillera Oriental, Santander, Sept. 7, 1944
(24 Senecio renumbered as 20736
20725 Porophyllum ruderale 13 Km. above mouth of Rio Surata, Cordillera Oriental, Santander, Sept. 8, 1944

20726 Pilea serpyllaceae of microphylla?
20727 Malpighiaceae
20728 Leguminosae vine
20729 Malpighiaceae vine
20630 Bocconia frutescens 25 Km. above mouth of

20731

FOREIGN ECONOMIC ADMINISTRATION

| | | |
|---|---|---|
| 20731 | Salix Humbotdtiana | |
| 20732 | Paullinia | |
| 20733 | Dioscorea polyonoides | |
| 20734 | Boehmeria caudata | |
| 20735 | Chamaefistula angustata | |
| 20736 | Senecio | |
| 20737 | Weinmannia | "Cascara" Pais, Rio de La Baja, Cordillera Oriental, Santander Sept. 13, 1944 |
| 20738 | Barnadesia spinosa | "Espino tate quieto" |
| 20739 | Compositae | "jarilla" |
| 20740 | Ericaceae | "Sepo" |
| 20741 | Compositae | "Guarguin" Motocoro, 2 Km. S. of Vetas, Rio Surata, Cordillera Oriental, Santander, Sept. 15, 1944 |
| 20742 | Baccharis | "Laurel" |
| 20743 | Monina | "Añil" |
| 20744 | Lauraceae? | |
| 20745 | Apium ? | "Apio páramo" |
| 20746 | Compositae | "Arnica" |
| 20747 | Myrsine | "Bordon" |
| 20748 | Compositae | "Pajarilla negra" |
| 20749 | Calceolaria | "Jeta de caballo" |
| 20750 | Compositae | "Ventocidad" |
| 20751 | Senecio | |
| 20752 | Lobelia | "Veronica" |
| 20753 | Senecio | "Ta nque", Páramo Rico, 5 Km. S. of California, Cordillera Oriental, Sept. 15, 1944. |
| 20754 | Geranium | "Campanillita" |
| 20755 | Hydrophyllaceae? | "Calendula" |
| 20756 | Lobeliaceae | |
| 20757 | Ranunculus | |
| 20758 | Senecio formosus | |
| 20759 | Compositae | |
| 20760 | Ranunculus | |
| 20761 | Eriocaulon | |
| 20762 | Callitriche | |
| 20763 | Halenia | |
| 20764 | Veronica | Vetas, Cordillera Oriental, Santander, Sept. 15, 1944 |
| 20765 | Labiatae | |
| 20766 | Compositae | Páramo de Saturbán, Cordillera Oriental, Santander, Sept. 16, 1944 |
| 20767 | Espeletia | |
| 20768 | Lamourouxia | |
| 20769 | Azorella new? | |
| 20770 | Halenia | |
| 20771 | Compositae | |
| 20772 | fern | |
| 20773 | Sisyrinchium bogotense | |
| 20774 | Lycopodium | |
| 20775 | Gentianaceae | |
| 20776 | Lupinus | |
| 20777 | Luzula racemosa | |
| 20778 | Castilleja | |
| 20779 | Espeletia | |

FOREIGN ECONOMIC ADMINISTRATION

| | | |
|---|---|---|
| 20780 Fuchsia | 15 Km. S. of Chitagá, Norte de Santander, Cordillera Oriental, 10,200 ft. | Sept. 24, 1944 |
| 20781 Ericaceae | | |
| 20782 Orchidaceae | | |
| 20783 Lobeliaceae | | |
| 20784 Hypericum | 20 Km. S. of 11,100 ft. | |
| 20785 Melastomaceae | | |
| 20786 Eryngium humile var. | | |
| 20787 Halenia | 5 Km. N. of Alto de Almorzadero, Chitagá Valley, Cordillera Oriental, Santander, 12,250 ft. | Sept. 24, 1944 |
| 20788 Compositae | | |
| 20789 Halenia | | |
| 20790 Hypochoeris setosa | | |
| 20791 Valeriana vetasana or longifolia | | |
| 20792 Arenaria muscifolmis | | |
| 20793 Ranunculus | | |
| 2 0794 Cardamine | 1 Km. N. of Alto de Almorzadero, Chitagá Valley, Cordillera Oriental, Santander, | Sept. 24, 1944 |
| 20795 Hieracium | 12,500 ft. | |
| 20796 Lycopodium Selago ? | | |
| 20797 Cerastium arvense ? | | |
| 20798 Senecio almorzaderonis or niveo-aureus | | |
| 20799 Compositae | Alto de Almorzadero, Chitagá Valley, Cordillera Oriental Santander, 12,700 ft. | Sept. 24, 1944. |
| 20800 Lysipoma acaulis | | |
| 20801 Orthocarpus | | |
| 20802 Epilobium | | |
| 20803 Cuphea | 3 Km. S. of Tunja, Cordillera Oriental, Boyacá, 12,250 ft. | Sept. 24, 1944 |
| 20804 Compositae | | |
| 20805 Paepalanthus petraeus | | |
| 20806 Fuchsia | Salto de Tequendama, Rio Bogotá, Cordillera Oriental, Cundinamarca, | Oct. 1, 1944 |
| 20807 Centropogon | | |
| 20808 Begonia | | |
| 20809 Tovaria | | |
| 20810 Solanaceae | | |
| 20811 Bocconia | | |
| 20812 Jacaranda | 5 Km. S. W. of Arbelaez, Rio Cuja, Cundinamarca, | Oct. 6, 1944 |
| 20813 Macrocnemum | 1 Km. N. W. of Coello, Rio Coello, Cordillera Central, Tolima, | Oct. 7, 1944 |
| 20814 Bocconia | 1 Km. E. of Cajamarca, Cordillera Central, Tolima, | Oct. 7, 1944. |
| 20815 Bocconia | 2 Km. E. of Depresión, Cordillera Central, Caldas, | Oct. 7, 1944. |
| 20816 Bocconia | "Pajarito" 4 Km. E. of Manizales, Rio Chinchiná, Cordillera Central, Caldas, | Oct. 10, 1944 |

20817 Psychotria — El Bosque, Km. 28, Manizales-Mariquita Highway, Cordillera Central, Caldas Oct. 17, 1944

20818 Iochroma aff. gesnerioides — Quebrada de Peñas Blancas, N. of Km. 29, Manizales-Mariquita Highway, Cordillera Central, Caldas Oct. 18, 1944.

20819 Chusquea Lehmanni ?

20820 Orchidaceae

20821 Vallea stipularis var.

20822 Begonia — Quebrada La Paila, 2 Km. N. of Km. 28, Manizales-Mariquita Highway, Cordillera Central, Caldas Oct. 18, 1944.

20823 Solanum — "Yerba mora"

20824 Lupinus — Rio Chinchina, Km. 12, Highway E. of Manizales, Cordillera Central, Caldas, Oct. 19, 1944.

20825 Centropogon aff. foetidus — Quebrada Termales, 5 Km. N. by road of Termales, Rio Chinchina, Cordillera Central, Caldas, Oct. 19, 1944.

20826 Saurauia brachybotrys var. macrantha — Rio Tapias, S. W. of Aranzazu, Caldas Oct. 22, 1944.

20827 Carica Goudotiana — "papayuelo" Union, Rio Chamberi, Cordillera Central, Caldas, Oct. 22, 1944.

20828 Macrocnemum

20829 Bocconia — Quebrada Honda, 5 Km. S. W. of Aranzazu, Cordillera Central, Caldas, Oct. 22, 1944.

2 0830 Bocconia — "Curador" Rio Tapias, 5 Km. N. of Neira, Caldas, Oct. 22

20831 Rubiaceae vine — Filo de La Selva, S. of Rio San Eugenio, Cordillera Central, Caldas Oct. 26, 1944.

20832 Rubiaceae

20833 Cleome, — Chaquiro Mine, Rio San Eugenio, Cordillera Central, Caldas Oct. 26, 1944

20834 Rubiaceae — Chaquiro-Páramo de Santa Rosa trail, S. of Chaquiro Falls, Rio San Eugenio, Cordillera Central, Oct. 28, 1944 Caldas

20835 Acanthaceae of Gesneriaceae

20836 tree alt. lvs. berries

20837 Fuchsia Hartwegi

20838 Physalis ?

20839 Solanaceae

20840 Acanthaceae

20841 Drimys — "Canelo"

20842 Bomarea

20843 Rubiaceae

20844 Hymenophyllum

20845 Vallea stipularis var. pubescens — 3 K. S. W. of Sibaté, Rio Muña, Cundinamarca Nov. 5, 1944.

20846 Carica female — "Papaya de monte" San Ramón-San Eugenio ridge, 15 Km. E. of Santa Rosa de Cabal, Cordiller Central, Caldas Nov. 13, 1944.

20847 Carica male — "

20848 Berberis — "Uvita" Campoalegre-San Ramón Ridge, Termales-Santa Isabel trail, E. of Santa Rosa de Cabal, Cordillera Central, Caldas Nov. 15, 1944

48

20849 Orchidaceae

FOREIGN ECONOMIC ADMINISTRATION

| | | |
|---|---|---|
| 20850 Fuchsia | "Pepino de monte" Campoalegre-San Ramon Ridge, Termales-Santa Isabel trail, E. of Santa Rosa de Cabal, Cordillera Central | Nov. 15, 1944. |
| 20851 Umbelliferae | "Anisillo" | |
| 20852 Viburnum | | |
| 20853 Nertera | Depresion, Cordillera Central | Nov. 18, 1944. |
| 20854 Liliaceae | Mt. N. of Quebrada Venus, E. of Armenia, Cordillera Central | Nov. 21, 1944. |
| 20855 Orchidaceae | | |
| 2 0856 Lycopodium | "Melena verde" | |
| 20857 Cinchona pubescens | 5 Km. N. of Circasia, Caldas | Nov. 22, 1944. |
| 20858 Centropogon | Filo Cachirí, W. of Quebrada Termales, Rio Chinchina, Cordillera Central | Nov. 24, 1944. |
| 20859 Centropogon | | |
| 20860 Orchidaceae | | |
| 20861 Orchidaceae | | |
| 20862 Orchidaceae | | |
| 20863 Orchidaceae | | |
| 20864 Gunnera | | |
| 20865 Gunnera | | |
| 20866 Gynandropsis | Quebrada Romeral, Rio Chinchina, Cordillera Central | Nov. 26, 1944. |
| 20867 Palicourea | | |
| 20868 Centropogon | | |
| 20869 Pinguicula | | |
| 20870 Cinchona pubescens | "Oreja de mula" (Bark sample) W. side of Quebrada Termales, 4 Km. S. of junction with Rio Chinchina, Cordillera Central, Caldas, | Nov. 27, 1944. |
| 20871 Macrocnemum | 8 Km. up Rio Apía on first uplands, Caldas, | Nov. 29. |
| 20872 Cinchona pubescens (Bark sample) | "Cascarilla" Quebrada Farallona, Rio Apía, Cordillera Occidental, Caldas | Nov. 29, 1944 |
| 20873 Cinchona pubescens | "Cascarilla" (Bark sample) Cuchilla San Rafael, 3 Km. W. of Santuario, Cordillera Occidental, Caldas | Dec. 1, 1944. |
| 20874 Gesneriaceae | Cerro Churumbelo, 2nd. ridge N. of Quebrada Peñasblancas, S. W. of Santuario, Cerro Tztama, Cordillera Occidental, Caldas | Dec. 3, 1944. |
| 20875 Orchidaceae | | |
| 20876 Orchidaceae | | |
| 20877 Gesneriaceae | | |
| 20878 Orchidaceae | | |
| 20879 Orhidaceae | | |
| 20880 Ericaceae | "Uvitas" | |
| 20881 Orchidaceae | | |
| 20882 Orchidaceae | | |
| 20883 Gesneriaceae | "Mancha de sangre" | |
| 20884 Orhhidaceae | | |
| 20885 Begonia | near head of Rio Mapa, Cerro Tatama, Cordillera Occidental | Dec. 4, 1944. |
| 20886 Orchidaceae | | |
| 20887 Gynandropsis | | |
| 20888 Acanthaceae | | |
| 20889 Carica | "Papayo" Rio Lejos, E. of Pijao, Cordiller Central | Dec. 10, 1944. |

20890 Vallea stipularis "Raque" Rio Lejos, camino a Páramo de Chilí, Cordillera Central, Caldas Dec. 10, 1944
20891 Lycopodium "Melena"
20892 Vallea stipularis "Manzano" Rio Azul, Páramo de Chilí, Cordillera Central Dec. 11, 1944
20893 Vallea stipularis "Manzano"
20894 Orchidaceae La Vega, Rio Azul, Páramo de Chilí, Cordillera Central, Caldas Dec. 11, 1944
20895 Compositae " " Dec. 12, 1944.
20896 Compositae "Cenizo"
20897 Pedicularis Rio Azul, Páramo de Chilí, Cordillera Central Caldas Dec. 12, 1944.
20898 Espeletia Páramo de Chilí, Quebrada El Oso, Cordillera Central, Tolima Dec. 12, 1944
20899 Compositae
20900 Centropogon

Harold St John / Columbia Collections
Field data copied from margins of
collecting sheets — by W. A. Archer

(3) 20501 Submerged in ditch in warm water, in ~~rubal Kaline~~ subalpine meadow, below hot spring. Podogynes fall with fruits. (2577 m. alt.)

(5) 20502 2 m. shrub; edge of thicket. lvs. below white velvety; stems white velvety; corolla white (455 m. alt)

(3) 20503 Herb 4-6 dm., in thicket. corolla blue, slightly irregular, tube deflexed and swollen. (455m alt.)

(6) 20504 Herb. to 1 m.; herbage viscid; corolla blue, slightly irregular. (455 m. alt.)

(5) 20505 2 m. shrub, edge of thicket. corolla pale blue; herbage velvety, lvs. above green, below white hairy. (455 m. alt.)

(5) 20506 2 m. shrub, lvs. above dark green, scabrous, impressed rugose, below green; fl. white, unpleasantly sweet, lobes rotate, slightly irregular; frt. depressed globose, greenish white. (455 m. alt.)

(6) 20507 Tree, 15 m. x 4 dm., bark brown, longit. fissured; lvs. above green, below whitish green, fl. yellowish (455.m. alt.)

(7) 20508 Tree, 8 m. x 3 dm., common in thickets. lvs. subcoriaceos, above dark shiny green, below ~~silvery~~ scaly; petals white. 460 m. alt.

(5) 20509 Tree, 8 m. x 3 dm., edge of thicket. fl. whitish, lvs. above shiny green, below pale green; 460 m. alt.

(7) 20510 2 m. shrub; common, edge of thicket. herbage velvety ♂ fl. whitish, lvs. chartaceous, thick, above green, below whitish green. ♀ fl. rare. 460 m. alt.

(5) 20511 shrub 3 - 6 dm. in thicket. lvs. subcoriaceous, above dark shiny green, below green; drupes bright red, juicy. 460 m. alt.

(7) 20512 5 km. s. of Ubaque. 2-3 m. shrub; leaflets above dark green, below pale green fl. bright yellow. 1900 m. alt.

(7) 20513 4 km. s. of Choachí. 2 m. shrub; roadside thicket. hairy white, leaflets above dark green, below pale green; petals pale yellow. alt. 2000 m.

(7) 20514 3 m. shrub, thicket in paramo; lvs. coriaceous, above dark shiny green, below pale green, bracts of inflorescence membranaceous, becoming pink; corolla tube pale reddish below, upper third and lobes green. 3200 m. alt.

(5) 20515 3 m. shrub, thicket in paramo; lvs. coriaceous, above dark shiny green, below pale green; calyx dark red, corolla tube red, throat and lobes pale red. 3200 m. alt.

(5) 20516 Tree, 6m. x 2dm.; Cult. at Instituto Biologico, Ciudad Universitaria. sap milky; fl. monoecious; fr. 1 dm. long with 5 deep furrows longit. 2600m.alt.

(5) 20517 ~~2 m. shrub, thicket common in this area, upper petals~~ thicket on hillside, 2m. shrub, calyx rose purple; 2 upper petals reflexed, purple. 2540 m. alt.

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(8) 20518 3m. shrub, petals deep blue but ~~yellow~~ keel yellow in ~~center~~ outer half. 2540m. alt.

(7) 20519 2m. shrub, thicket on hillside. 2540m. alt.

(2) 20520 thicket on hillside, terrestrial. lvs. fleshy, green above, pale green below. 2540 m. alt.

(9) 20521 Thicket on hillside, plants sprawling. ~~or~~ leaflets green above, pale green below; 2560m. alt. Standard with lower half of margin bule with darker lines, the upper half ~~az~~ and apex white turning ~~pik~~ pink, wings blue with darker veins, standard whitish, ~~bluish~~ bluish veins fusing toward the black tip; pods black.

leaflets off after labels for USA

(5) 20522 On damp mossy ground, thicket on main divide. trailing, forming mats; ~~lvs.~~ lvs blue green; fl. corolla green, campanulate; stamens 4, styles 2; drupes 2.5-3 m.m. diam., dull red. 2500 m. alt.

(1) 20523 3m. shrub in thicket. lvs. thick, deeply impressed-nerved above; corolla orange yellow. 2700 m. alt.

(6) 20524 Thicket on steep hillside. suffrutescent, decumbent at base, ~~lvs. above dark green, scabrous; below whitish green, the main veins red hairy.~~ Infl. and fl. scarlet. 2600 m. alt.

(6) 20525 Steep, wet, springy bank, on sphagnum. stem erect, 1-3dm. tall, 1dm. diam.; lvs. scabrous, above dark green, below pale green; buds red, fl. greenish. 2600 m. alt.

(6) 20526 Tufts on steep, wet, Sphagnum coated ride of gulch. 2400 m. alt.

(5) 20527 2m. herb., wet springy gulch on Sphagnum moss! fl. yellow sap milky.

(7) 20528 3m. shrub, thicket on wet hillside, calyx and corolla scarlet, berry purple. 2400m. alt.

(1) 20529 Thicket on moist wooded hillside, several erect stems 1.5m.; lvs. fleshy, above green, below crimson; calyx rose magenta; corolla tube rose-colored, throat yellow. 2400m. alt.

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(2) 20530 Moist ∕ temperate forest. Tree 8 m x 1.5 dm. Pedicels reddish tinged; corolla white. Alt. 2300 m.

(5) 20531 Moist temperate forest. Shrub6 m. x 5 cm. Alt. 2300.

(4) 20532 " " " . Tree 8 m. x 1.5 dm.; lvs. above blue-green, midvein white; inflor. reddish, corolla white; berries 6 mm. diam., blue. Alt. 2300 m.

(4) 20533 Moist temperate forest. Tree 8 m. x 4 cm.; stems 4-angled; hairs white to reddish; lvs. above imprssed veiny; fl. ♂, hypanthium reddish, stamens yellowish to green. Alt. 2300 m.

(5) 20535 Subparamo, above San Cristobal. 2 m. shrub, lvs. thick but not stiff; involucral bracts herbaceous, greenish, the larger ones in 2 rows; fl. yellow, discoid, homogamous; styles cylindric; pappus capillary. Alt. 2700 m.

(5) 20536 2 m. shrub in thicket by roadside. Woody at base, 2 cm. diam.; corolla rose-carmine but throat white with rose magenta ring surrounding it. Alt. 1500 m.

(4) 20537 Shrub 3 m., in thicket. Lvs. firm chartaceous; petals rose purple. Alt. 1200 m.

(9) 20538 Shrub 3 m., in thicket. Lvs. dark green, glaucous; petals bright yellow. Alt. 1200 m.

(3) 20539 Tree 8 m., in thicket. Lvs. glutinous; involucre white; fl. white. Alt. 1200 m.

(5) 20540 Tree 6 m., in thicket. Petals yellowish with red lines; fr. broadly ovoid. Alt. 1200 m.

(9) 20541 Tree 8 m. in thicket. Lvs. firm chartaceous, shiny above. Alt. 1200

(5) 20542 Open scrub. Erect herb; petals rose magenta. Alt. 1200 m.

(3) 20543 In grassland. Herb; heads white. Alt. 1200 m.

(6) 20544 Gravel by river road. Flr. orange. Alt. 450 m.

(5) 20545 Thicket on arid slopes. 2 m. shrub; fl. white. Alt. 450 m.

(6) 20546 " " " " 5 m. tree; fl. green; fr. white. Alt. 450 m.

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(7) 20547 Thicket, arid hillside. 8 m. tree; lvs. shiny above; aments yellowish green; sap milky. Alt. 450 m.

(4) 20548 3 m. shrub; lvs. soft; fl. pale lavender. Alt. 450 m.

(6) 20549 Shady bank of stream gorge. fronds pendant. Alt. 200 m.

(5) 20550 Shady stream gorge. 7 m. tree; lvs. shiny; calyx bright red. Alt. 200 m.

(7) 20551 Shady stream gorge. Shrub 5 m.; fl. white; berries red, 3-4 mm. diam. Alt. 200 m.

(7) 20552 Tropical woods with palms, etc. Wooded ridge. Tree 8 m. x 2 dm., common. Alt. 2000 m.
"quina colorada" "quina roja"
Harvested by Luis Antonio Caseeris of Bucaramanga.

Note: some of data not legible

(10) 20553 Tropical woods with palms, etc. Common. Tree 15 m. x 1.5 dm. Lvs. subcoriaceous, lateral; veins impressed above, prominent below; fl. white, sweetly fragrant; fr. dehiscing from above. Alt. 2460 m.

(5) 20554 In crevices of sandstone. Plant tufted; petals white shading to yellowish green at base; sepals yellowish green at tips, shading to bright salmon at base. Alt. 200 m.

(4) 20555 Tropical forest, dry, on sandstone. Tree 8 m. x 2 dm.; lvs. chartaceous; fl. white, fragrant. Alt. 600 m.

(5) 20556 Moist tropical forest. Tree 6 m. tall; lvs. shiny above; fl. bright yellow, corolla lobes revolute. Alt. 3000 m.

(5) 20557 Dense, moist tropical forest. Herb 4-6 dm. tall; somewhat fleshy; lvs. shiny above; corollas greenish white; berries white, 3 mm. diam., globose. Alt. 3000 m.

(5) 20558 Moist, tropical forest. Vine 5 m., sap milky; calyx green, corolla deep rose color; anthers lavender. Alt. 3200 m.

(6) 20559 Deep shade, wet woods by stream. 5 m. shrub; corolla deep orange. Alt. 3500 m.

(7) 20560 Moist tropical woods on steep slope. Shrub 6 m.; fl. white; pedicels of inflorescence white. Alt. 3500 m.

(6) 20561 Subtropical forest, moist. Subfructescent with long branch to 5 m.; lvs. thick chartaceous; corolla scarlet, pendent. Alt. 4000 m.

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(7) 20562 Moist, subtropical forest. Tree 8 m. x 1 dm.; lvs. chartaceous; corolla orange; berry orange. Alt. 3500 m.

(3) 20563 Moist, subtropical forest. Shrub to 5 m.; bracts vermillion; corolla pale yellow; berries blue. Alt. 3900 m.

(1) 20564 Forming mats 2-4 dm. thick on moist, soft sandstone rocks, near summit. Alt. 4000 m.

(5) 20565 West subtropical forest. Shrub to 6 m.; stems weak, hollow, square, 4-winged; lvs. fleshy chartaceous; corolla pale yellowish, tube & lobes with 2 heavy magenta lines, ~~mxhmx~~ Other plants with corolla suffused with pale or deep rose/ color. Alt. 4000 m.

(2) 20566 Edge of clearing.~~kyxfkmmxx~~ Tree 8 m. x 16 cm. Alt. 2300 m.

(10) 20567 "Quina roja". Tropical woods on ridge with tree fern -"bihai". Tree 10 m. x 1.5 dm.; lvs. subcoriaceous; corolla white, sweet fragrant; lobes almost rotate. Alt. 1170m.

(7) 20568 "Quina roja". Occasional in tropical woods on main ridge with tree ferns, palms, etc. Tree 7 m. x 8 cm.; lvs. subcoriaceous; fl. white, sweet fragrant. Alt. 1230 m.

(4) 20569 "Quina roja" Wooded W. slope, near summit, with Melastomaceae, Palmae, tree ferns, etc. Tree 13 m. x 1.5 dm.; lvs. subcoriaceos; corolla white, 5-6 lobes slightly revolute, sweet fragrant. Alt.1234m

(5) 20570 Woods near crest mountain top. Shrub 5 m.; lvs. thick, chartaceous. Alt. 1170 m.

(6) 20571 Moist gulch,east side,tropical forest. Tree 20 m. x 4 dm.; lvs. thick chartaceous; fl. white, sweet fragrant, lobes rotate. Alt. 1170m.

(4) 20572 Dense tropical woods. Petals and sepals white, of unequal width. Alt. 2800 ft. 860 m.

(4) 20573 Moist tropical forest, with palms, Sapotaceae, etc. Erect, simple shrub, 2-6 m. tall; bracts & calyx crimson, corolla yellow. Alt. 2450 ft. 755 m.

(6) 20574 Moist tropical forest with Zingerbaceae, "platanillo", Cecropia,etc. Tree 9 m. x 1.5 dm.; lvs. somewhat shiny above, chartaceous; corolla white. Alt. 818 m.

(1) 20575 "Quina colorada" Moist ridge tropical woods, with palms, Araceae, Melastomaceae,Thalia, etc. Tree 10 x 1dm.; lvs. thick, firm Chartaceous; fl. sweet fragrant, corollas white, lobes rotate; frt. brown. Alt. 1075 m.

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(7) 20576 "quina colorada" Moist tropical forest on ridge; tree 8 m.x 1 dm.; others up to 20 m. x 3 dm.; lvs. firm chartaceous; fl. sweet fragrant, corolla white, libes rotate; fr. brown. Alt. 1000 m.

(5) 20577 "corpus". Thicket at edge forest. Shrub 3-5 m. tall; lvs. chartaceous; inflor. in axis on lst branches, red; pedicels yellow; corollas yellow with dull reddish orifice. 770 m. Alt. 2500 ft.

(5) 20578 Moist forest. Under herb; flr. white. Alt. 2500 ft. 770 m.

(4) 20579 Edge of moist tropical forest. Young tree 6 m.; ~~xxxxxxxxx~~ coralla pale blue. Alt. 2700 ft. 830 m.

(5) 20580 "picuritu" Thicket at edge of forest. Shrub 3 m.; fl. white. Alt. 2500 ft. 770 m.

(6) 20581 "café". Moist tropical forest. Tree 7 m.; bracts & calyx red. Alt. 3000 ft. 925 m.

(8) 20582 ~~1~~ Moist tropical woods. Common tree, young one 9 m. x 8 dm. Alt. 3000 ft. 925 m.

(4) 20583 Moist tropical forest. 5 m. shrub. Alt. 3000 ft. 925 m.

(8) 20584 Climbing on thicket. Bracts, calyx, corolla carmine red; outer division of corona carmine, the inner carmine with white tips. Alt. 295 m.

(6) 20585 ~~xxxxx~~ Thicket. Vine on herbs; fl. white. Alt. 250 m.

(6) 20586 On wet rocks on steep bank by stream. Lvs. mottled with brown or purple, below lavender, the midribs and veins pale green; corolla carmine-red. Alt. 185 m.

(5) 20587 Vine on thicket by stream, with milky sap. Fl. yellow, odor of cloves. Alt. 185 m.

(6) 20588 "manchador". Remnant of forest in valley. Young tree 7 m. x 1 dm.; sap milky turning orange. Alt. 3100 ft. 955 m.

(4) 20589 ~~xxxxxx~~ Remnant of forest by stream. Tree 8 m. x 1 dm.; corolla greenish. Alt. 3100 ft. 955 m.

The quina only on the ridge of the E. crest above sandstone cliff. Grove exploited years ago by Evanjelista Ardilá, Pedro Navaro, et al.

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(4) 20590 Remnant of forest. 7 m. shrub, with long wand-like branches; calyx lobes red-dotted within, petals yellow. Alt. 3100 ft. 955 m.

(5) 20591 Thicket by stream. Vine on bushes; involucre green; pappus white. Alt. 3100 ft. 955 m.

(7) 20592 Thicket in gulch. Vine on bushes; lvs. chartaceous; fl. white, fading brown; calyx white; berry purple, 5-celled. Alt. 3100 ft. 955 m.

(7) 20593 Remnant of forest by stream. Young tree 8 m. x 1 dm.; lvs. firm chartaceous. Alt. 3100 ft. 955 m.

(4) 20594 "machanillo". Remnant of forest by stream. Lvs. firm chartaceous, [illegible], above shiny; [illegible] male fl. greenish, female fl. green. Good firewood. Alt. 3100 ft. 955 m.

(7) "gachi" [illegible]
20595 / [illegible] Remnant of forest by stream. Tree 8 m. x 3 dm.; sap resinous; lvs. coriaceous; petals white. Alt. 3100 ft. 955 m.

(5) 20596 Terrestrial in dry grassland. Lvs. fleshy, rigid; outer petals & sepals orange, lip yellow, with central short line and 2 spots of red. Alt. 3100 ft. 955 m.

(4) 20597 Thicket by stream. Young tree or shrub; lvs. soft chartaceous; berries red. Alt. 3100 ft. 955 m.

(5) 20598 Forest by stream. Shrub 10 m. tall; petals rose-purple. Alt. 3100 ft. 955 m.

(5) 20599 Forest by stream. 7 m. shrub; lvs. soft chartaceous; bracts carmine. Alt. 3100 ft. 955 m.

(4) 20600 Forest by stream. 7 m. shrub. Alt. 3100 ft. 955 m.

(6) 20601 " " " Tree 8 m. x 2 dm.; lvs. chartaceous; fl. white, sweet fragrant. Alt. 3100 ft. 955 m.

(7) 20602 Thicket on ridge. Shrub 4 m. tall; lvs. chartaceous, shiny green above; [illegible] Alt. 3400 ft. 1045 m.

(5) 20603 Thicket on ridge. Tree 10 m. x 3 dm., trunk with short stout spines; lvs. chartaceous; corolla lobes recurving, sky blue; berries globose. Alt. 3400 ft. 1045 m.

(6) 20604 Wet thicket, edge of open paramo. 2 m. shrub; lvs. coriaceous; petals magenta; anthers yellow, erect. Alt. 2960 m.

(4) 20605 Wet thicket, edge of open paramo. 3 m. shrub; lvs. coriaceous; involucre green; corollas yellow. Alt. 2960 m.

(6) 20606 Open wet paramo. In tufts; bracts dark brown, the margins paler; petals yellow. Alt. 2960 m.

[illegible]

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(4) 20607 Wet paramo. Trunk 3 dm. tall; pubescense whitish except on heads and young leaves where brown; rays yellow, disk at first yellow, then brownish. Alt. 2960 m.

(2) 20608 Dripping, mossy bank. Stems red; petals white, or the outer pair red without. Alt. 2900 m.

(5) 20609 Dripping, mossy bank. Stems fleshy; lvs. subfleshy, below pale green or purplish tinted; corolla yellow. Alt. 2900 m.

(7) 20610 Dripping, mossy bank. Stems reddish; lvs. thick, firm; sepals green with reddish margin; petals lavender, deeper in throat, lower petal with dark violet parallel veins. Alt. 2900 m.

(5) 20611 Dripping, mossy bank. Lvs. thick, firm; fr. orange, fleshy, ovoid 3 mm. long. Alt. 2900 m.

(9) 20612 Wet, mossy bank by stream. Trunk 2 dm. tall, 1 dm. diam.( Other plants have lvs. 2 x as large and fr. infl. 1.5 m. long. The loose fr. infl. is a tip of such a one). Alt. 2900 m.

(10) 20613 Wet thicket on steep slope. Weak, 3 m. shrub; sap milky; lvs. firm chartaceous, margins revolute; corolla red, anthers blackish violet, tufts white. Alt. 2900 m.

"quinan"

(6) 20614/ Tropical woods with palms, Aracaceae, Thalia, etc. Tree 10 m. x 3 dm.; lvs chartaceous; pubescense white, divergent; caylx enlargement white; fl. fragrant; corolla white, lobes recurved. Alt. 310 m.

(4) 20615 "quina blanca". Tropical woods with Smilax, tree ferns, palms, Araceae. Tree 10 m. x 2 dm.; lvs. subcoriaceous, lateral veins depressed; fl. sweet & fragrant; corolla white, lobes rotate. Alt. 690 m.

(9) 20616 "quina blanca". Tropical forest. Tree 8 m. x 2 dm.; capsule dehiscent from top. (With No. 20615) Alt. 690 m.

(7) 20617 "quina blanca". Dry tropical forest with palms, Araceae, and many Dicots. Tree 10 m. x 15 cm., bark thin, the outer separating on peeling; lvs. subcoriaceous, lateral nerves impressed; fl. sweet fragrant, corolla white, the lobes spreading. Alt. 525 m.

(7) 20618 Dry tropical forest, on sandstone. Tree 10 m. x 2 dm.; fl. white. With No. 20617. Alt. 525 m.

(5) 20619 Dry tropical forest, with Cyclanthus, Melastomaceae, etc. Tree 10 m. x 15 cm.; lvs. subcoriaceous, lateral nerves impressed; fl. white, sweet fragrant; corolla lobes spreading. Alt. 430 m.

"quina blanca".

(8) 20620/ Dry tropical forest, with Palicourea and many Dicots. on sandstone. Tree 8 m. x 1 dm; lvs. subcoriaceous; capsules dehiscent from top. Alt. 310 m.

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1.

(7) 20621 Dry tropical forest, base of sandstone ridge, with Araceae, Fimbristylis, Warscewiczia, etc. Tree 9 m. x 1 dm. Lvs. thick, firm chartaceous, lateral nerves impressed; fl. sweet fragrant, corolla white, lobes spreading. Alt.180 ft. 54 m.

(10) 20622 "quina blanca"
Mass collection to show leaves and stipules of lower lateral sterile branches of No. 20621. Alt. 180 ft. 54 m.

(4) 20623 "quina blanca".
Mass collection leaves and stipules of flowering lateral and upper branches of No. 20621. Alt. 180 ft. 54 m.

(7) 20624 "quina blanca"
Mass collection of fruiting lateral and upper branches of No. 20621. Alt. 180 ft. 54 m.

(11) 20625 Dry tropical woods on sandstone. Tree 15 m. x 20 cm.; fl. white. Alt. 180 ft. 54 m.

(6) 20626 "quina blanca"
Dry open forest on sandstone,with few trees and 1 m. thicket of Gleichenia. Tree 8 m. x 8 cm.; lvs. subcoriaceous, lateral veins never compressed; fl. sweet fragrant, corolla white, lobes spreading. Some leaves abnormal, perhaps from drought. Alt. 191 m.

(7) 20627 "quina blanca"
Dry low woods on sandstone, with Melastomaceae, Warscewiczia, Fimbristylis, etc.. Tree 8 m. x 1 dm.; lvs. thick, firm chartaceous, veins slightly impressed; fl. sweet fragrant, corolla white, the tube tapering below the middle, lobes fully recurved. Alt. 250 m.

(9) 20628 "quina blanca"
Dry low woods on sandstone, with Melastomaceae, Warscewiczia, Fimbristylis, etc. Tree 20 m. x 35 cm.; lvs. subcoriaceous, lateral veins impressed; ~~xxxxxxxxxxx~~ fl. sweet fragrant, corolla white, lobes rotate. Alt. 250 m.

(5) 20629 Dry, low ~~xxx~~ forest, shallow soil on sandstone, tree rare, with Melastomaceae, Fimbristylis, etc. Tree 8 m. x 1 dm.; lvs. subcoriaceous, lateral veins impressed; fl. sweet fragrant, corolla white, in age with lobes somewhat recurved. Alt. 340 m.

(5) 20630 Dry, low woods, shallow soil on sandstone. Tree 10 m. x 15 cm.; lvs. subcoriaceous, lateral veins impressed; capsule splitting from above. Alt. 310 m.

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"arisa"

(7) 20631 Moistxwaist woods by stream. Tree occasional. Tree 10 m. x 1 dm./, bark dark brown/, wood very hard; bracts, sepals, petals rose carmine. Alt. 500 ft. 155m.

(5) 20632 "granada". Vine in woods; fl. scarlet. Alt. 500 ft. 155 m.

(4) 20633 "quina".
Moist tropical woods, with palms, tree ferns, Chusquea, Cephaelis, etc. Tree 8 m. x 8 cm; lvs. subcoriaceous, lateral veins impressed. Alt. 1176 m.
St. John & Arcila

(5) 20634 "quina tuna"
Tropical woods on lateral ridge, with Warscewiczia, Smilax, tree ferns, etc. Sucker shoots ca. 7 yrs. old, from old stump, 5 m. tall x 5 cm.; lvs. subcoriaceous, lateral veins impressed; fl. sweet fragrant, corolla white, lobes recurving. Alt. 1100 ft. 340 m.
St. John & Arcila.

(9) 20635 "quina tuna"
Tropical woods on sandstone, with Warscewiczia, Lecythidaceae, Calycophylla, palms, etc. Tree 10 m. x 15 cm., bark gray to green, rough; lvs. soft, thick chartaceous, shiny above, lateral veins not impressed; infl. terminal; capsules dehiscing from above. Alt. 460 m.

(7) 20636 "quina tuna"
Tropical woods on sandstone. Tree 8 m. x 10 cm.; lvs. thick, chartaceous, shiny above; infl. terminal; pods splitting from above. Alt. 430 m.

(7) 20637 "quina tuna"
Narrow wooded ridge in tropical forest on sandstone, with Calycophylla, Warcewiczia, etc. Tree 6 m. x 4 cm.; lvs. subcoriaceous, lateral veins impressed; fl. sweet fragrant, corolla white, lobes recurving. Alt. 400 m.

(4) 20638 "quina tuna"
Tropical woods with Warcewiczia, tree ferns, palms, Araceae. On xxxx sandstone. Tree 5 m. x 3 cms. Alt. 550 ft. 170 m.

(6) 20639 "quina tuna"
Tropical woods on sandstone, with tree ferns, palms, Araceae, Fimbristylis, etc. Tree 8 m. x 5 cm.; lvs. subcoriaceous, lateral veins impressed; fl. sweet fragrant, corolla white. Alt. 3000 ft. 925 m.

(4) 20640 "quina tuna"
Tropical forest on sandstone, with palms, tree ferns, Araceae, Cyclanthaceae. Tree 13 m. x 15 cm.; lvs. subcoriaceous, lateral veins impressed; fl. white. Alt. 3200 ft. 985 m.

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(4) 20641 "quinon"
Moist tropical woods on sandstone. Tree 15 m. x 2 dm..

(4) 20642 "punta de lanza" on sandstone,
Tropical woods with palms, Cephaelis, Araceae, etc. Young tree 7 m. x 4 cm.; lvs. subcoriaceous, lateral veins impressed; fl. sweet fragrant, corolla white. Alt. 460 m.

(3) 20643 Tropical woods on sandstone, with palms, tree ferns, Araceae, etc. Tree 13 m. x 1 dm., sterile; lvs. subcoriaceous; lateral nerves impressed. Alt. 400 m.

(5) 20644 Tropical woods, near summit, with palms, tree ferns, Melastomaceae, Smilax, Cephaelis, Warcewiczia, etc. Tree 10 m. x 15 cm., lvs. subcoriaceous, lateral veins impressed; fl. sweet fragrant, corolla white, lobes recurving. Alt. 615 m.

(4) 20645 Dry grassy hillside. One clone; lip yellow in throat, magenta on fringe. Alt. 5650 ft. 1740 m.

(2) 20646 Dry grassy hillside. One clone near the other No. 20645. Corolla white, lip yellow in throat, margin & fringe white. Alt. 5650 ft. 1740 m.

(7) 20647 Stream bank in gorge in shale. Young tree 6 m. x 5 cm. Alt. 6700 ft. 2060 m.

(5) 20648 By stream, in gorge, in shale. 2 m. shrub; petals white. Alt. 6700 ft. 2060 m.

(10) 20649 Gorge in shale, streambank. 2 m. shrub; lvs. above dark blue-green; fl. bright orange. Alt. 7600 ft. 2355 m.

(4) 20650 Stream gorge, moist bank with Selaginella. Disk & ray yellow, pubescence white. Alt. 7600 ft. 2355 m.

(4) 20651 Moist, shady gorge, in shale. 5 m. shrub; corolla fleshy, pink; berry black. Alt. 7600 ft. 2355 m.

(5) 20652 Shady gorge in shale. 5 m. shrub; lvs. subcoriaceous; inflor. axis red; calyx & corolla yellow. Alt. 7600 ft. 2355 m.

(7) 20653 Shady gorge in shale. 5 m. shrub; lvs. soft, thick chartaceous. Alt. 7600 ft. 2355 m.

(5) 20654 "Santa Maria"
Shady gorge in shale. Vine, climbing 5 m. or more over trees; lvs. thick chartaceous, above with white hairs scarcely visible; rays & disk yellow. Alt. 7600 ft. 2355 m.

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(6) 20655 Shady gorge in shale. 2 m. arching shrub; corolla dull yellow; berries red, 5-6 mm. diam. Alt. 7600 ft. 2355 m.

(7) 20656 Shady gorge in shale. 3 m. shrub with elongate arching branches, stems & veins rusty pubescent; [illegible]
Alt. 7600 ft. 2355m. Data [illegible] not readable)

(9) 20657 Shady gorge in shale. Herb on moist shady bank; lvs. thick [illegible] chartaceous; fl. blue; berries [illegible] blue. Alt. 7600 ft. 2355 m.

(12) 20658 Shady gorge in shale, on steep bank. Shrub 3 m. tall; lvs. coriaceous, main veins impressed; bracts whitish; berries blue. Alt. 7600 ft. 2355 m.

(4) 20659 Shady gorge in shale. 1 m. suffrutescent; fl. white; berries blue. Alt. 7600 ft. 2355 m.

(4) 20660 Shady gorge in shale. Vine climbing 5 m. or more over trees; lvs. shiny; [illegible] calyx orange; corolla yellow. Alt. 7600 ft. 2355 m.

(5) 20661 Shady gorge in shale. Vine climbing high over trees; sepals rose magenta except tips, green spotted with purplish black; petal claw rose magenta; limb green, spotted with purplish black. Alt. 7600 ft. 2355 m.

(5) 20662 Shady gorge in shale. Shrub 4 m.; spathe green; spadix cream colored, in fruit white. Alt. 7600 ft. 2355 m.

(5) 20663 Moist, shady gorge in shale. Erect herb; perianth pink; roots fibrous. Alt. 7600 ft. 2355 m.

(2) 20664 "quiche"
Moist shady gorge in shale. Erect, stout herb, stems 3 dm. tall, 2 cm. diam.; lvs. shiny above; bracts dark green, black tipped; corolla coffee-colored. Alt. 7600 ft. 2355 m.

(9) 20670 "uva"
Thicket by stream, in subparamo. Shrub 6 m. tall, with few, high arching branches; lvs. coriaceous; tip of corolla white, the base carmine as are calyx, style, and pedicels. Alt. 8000 ft. 2475 m.

(2) 20671 Wet swale in sphagnum [illegible] with Utricularia, Lycopodium, Eriocaulon, Xyris. Paramo. Alt. 8000 ft. 2475 m.

(4) 20672 Terrestrial in wet swale with Sphagnum, Ericaulon, Lycopodium, Utricularia, [illegible] Xyris, etc. Buds magenta tinged towards base, open fl. with perianth white, lip white, magenta spotted on epichil. Alt. 8000 ft. 2475 m.

(5) 20673 Thicket on steep bank. [illegible] 1 m. shrub; corolla carmine. Alt. 9200 ft. 2870 m.

(2) 20674 Moist sandy slope. Perianth green. Alt. 9100 ft. 2835 m.

(5) 20675 Thicket on steep slope. Lvs. firm; involucre pale green; disk fl. yellow. Alt. 9000 ft. 2805 m.

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(5) 20676 In thicket, steep rocky bank. ~~Vines~~ Vine climbing on shrubs; Lvs. firm, above shiny; buds black, fl. deep maroon. Alt. 9000 ft. 2805 m

(2) 20677 On steep mossy bank. Lvs. grey; bracts & calyx pink, corollas deep lavender blue. Alt. 9000 ft. 2805 m.

(2) 20678 Wooded bank of river. Trailing shrub; fr. orange. Alt. 5700 ft. 1755 m.

(2) 20678 1/2 Thicket on steep slope. 4 m. shrub; corolla greenish, fragrant. 9000 ft. alt. 2805 m.

(5) 20679 Forest by river bank. Tree 8 m. x 3 dm.; fl. & fr. green. Alt. 8700 ft. 2705 m.

(6) 20680 Thicket by river bank. 4 m. tall, stems glaucous. Alt. 8700 ft. 2705 m.

(6) 20681 " " " " " " " " " " " "

~~" x x x x~~

(4) 20682 Submerged in swift river. Alt. 8700 ft. 2705 m.

(8) 20683 Weed in field of maize. Rays white, disk yellow. Alt. 8700 ft. 2705 m.

(10) 20684 Weed in field of maize. Rays pink to white, disk yellow. Alt. 8700 ft. 2705 m.

(2) 20685 Weed in field of maize. Ray & disk yellow. Alt. 1620 m.

(1) 20686 Escaped?, in field. Alt. 1620 m.

(7) 20687 "guaria"
Weed in pasture. Rays magenta, disk yellow. Lvs. eaten in potato soup. Alt. 1620 m.

(7) 20688 (same as above)

(3) 20689 Paramo. Shrub 1-5 dm., buds magenta, fl. white. Alt. 11000 ft. 3445 m.

(4) 20690 Paramo. Corolla rose magenta without, within whitish; stigmas whitish. Alt. 11000 ft. 3445 m.

(2) 20691 Paramo. Low shrub; corolla white. Alt. 11000 ft. 3445 m

(4) 20692 " . Trailing in heath. Alt. 11000 ft. 3445 m.

(1) 20693 " . Climbing on herbs. " " " 3445 m.

(2) 20694 " . Tip of bud greenish, spurs white. Alt. 11000 ft. 3445 m.

(4) 20695 " . Erect shrub; fl. yellow. Alt. 11000 ft. 3445 m.

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(3) 20696 Paramo. Bracts scarlet, corolla upper lip green, lower lip yellow. Alt. 11000 ft. 3445 m.

(3) 20697 Paramo. Outer bracts pale brownish. Alt. 11000 ft. 3445 m

(5) 20698 Paramo. Fl. bright lilac, calyx lobes 6, petals 3, stamens yellow, filaments turgid. Alt. 11000 ft. 3445 m.

(2) 20699 Paramo. Stems reddish; bracts reddish; calyx reddish, corolla green. Alt. 11000 ft. 3445 m.

(1) 20700 Paramo. Terrestrial. Rhachis brown; bracts sepals without salmon-colored, corolla cream. Alt. 11000 ft. 3445 m.

(1) 20701 Paramo. Prostrate, the tips assurgent; fl. pale lavender. Alt. 11000 ft. 3445 m.

(2) 20702 Paramo. In thick heath. Alt. 11000 ft. 3445 m.

(6) 20703 " Tufted in heath. Infl. dull purplish. Alt. 11000 ft. 3445 m.

(5) 20704 " Shrub 3-6 ft.; fl. white. Alt. 11000 ft. 3445 m.

(6) 20705 " 6 m. tree; fr. green, warty, fleshy. Alt. 11000 ft. 3446 m.

(7) 20706 " Canes arching; hairs red; petals pink. Alt. 11000 ft. 3445 m.

(4) 20707 " Lvs. prostrate; spikes reddish. Alt. 11000 ft. 3445 m.

(5) 20708 " Shrub 1 m.; stem and calyx blackish purple; fl. blue. Alt. 11000 ft. 3445 m.

(5) 20709 Shrub, branches arching; fl. yellow. Alt. 11000 ft. 3446 m.

(4) 20710 Paramo. Stiff, erect shrub, 2-3 dm.; lvs. decussate. Alt. 11000 ft. 3445 m.

(4) 20711 " Erect 2-3 m. shrub; fl. pink. Alt. 11000 ft. 3445 m.

(2) 20712 " Erect in heath; fl. pink. Alt. 11000 ft. 3445 m.

(1) 20713 " Fl. yellow. Alt. 11000 ft. 3445 m.

(1) 20714 " Alt. 11000 ft. 3445 m.

(1) 20715 " Rays white, disk yellow, involucre green. Alt. 11000 ft. 3445 m.

(5) 20716 " 5 m. shrub. Alt. 11000 ft. 3445 m.

(5) 20717 Dry slopes. Shrub 1 m., aromatic; corolla white. Alt. 3750 ft. 1153 m.

(5) 20718 Dry steep slope. 1 m. shrub, herbage aromatic; fl. white. Alt. 3750 ft 1153 m.

(4) 20719 " " " 1 m. shrub; corolla blue. Alt. 3750 ft. 1153 m.

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(3) 20720 Steep, dry slope. Vine, sap milky; fl. white. Alt. 3500 ft. 1075 m.

(3) 20721 " " " Vine over herbs; calyx lobes pale green; corolla magenta. Alt. 3500 ft. 1075 m.

(3) 20722 Dry, steep slope. Lvs. aromatic; fl. pale blue. Alt. 3500 ft. 1075 m.

(4) 20723 Steep, rocky, dry slope. 4 m. shrub; lvs. glaucous; fl. tinged with purple. Alt. 2200 ft. 675 m.

(4) 20724 Parasitic on roadside shrubs. Corolla areolate, white. Alt. 1605 m.

(5) 20725 Roadside. Herbage glaucous; corolla dark mahogany; anthers & stigmas green. Alt. 3000 ft. 925 m.

(9) 20726 On steep cliffs. Plants fleshy. Alt. 2600 ft. 800 m.

(9) 20727 Vine, in thicket by river. Fr. wings greenish; petals yellow, turning orange. Alt. 2800 ft. 860 m.

(8) 20728 Vine on roadside thicket. Wings white; keel & standard yellow with blackish tips. Alt. 2600 ft. 800 m.

(5) 20729 Vine on thicket. Petals rose-colored, fading white. Alt. 2700 ft. 830 m.

(5) 20730 Basalt talus. 6 m. shrub; lvs. white beneath; sap staining bright yellow. Alt. 3950 ft. 1215 m.

(8) 20731 River bank. Tree 8 m. x 3 dm.; wood brittle, young branches drooping. Alt. 3950 ft. 1215 m.

(4) 20732 Vine on bushes. Fl. white. Alt. 3950 ft. 1215 m.

(4) 20733 Vine trailing on basalt gravel. Perianth green, 5-lobed. Alt. 3950 ft. 1215 m.

(5) 20734 Gravelly river bank. 5 m. bush. Alt. 3950 ft. 1215 m.

(6) 20735 Thicket by river. Vine; fl. sweet fragrant; petals & sepals yellow. Alt. 4200 ft. 1290 m.

(9) 20736 Thicket by roadside. Herb 3 m. tall; fl. yellow. Alt. 3000 ft. 925 m.

(10) 20737 "cascara"
Thicket along stream in scrub paramo. Tree 8 m. x d dm.; lvs. coriaceous, shiny above green, below whitish hairs; fl. whitish. Alt. 11000 ft. 3445

3dm - OK Leif WAR

(5) 20738 "espina tate guieta"
4 m. shrub in paramo. Involucre purplish black; rays white, reflexed; anthers brown, stigmas pink. Alt. 11000 ft. 3445

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(4) 20739 "jarilla"
Paramo. Common shrub; herbage glutinous; involucre with lower bracts brown with purplish margins; upper bracts green with white margins; corolla white; stigmas lavender tinged.
Alt. ~~11~~ 11650 m. 3645

(4) 20740 "sepo"
Scrub in paramo. Shrub 1-4 m. tall; lvs. coriaceous, ~~mmxxw~~ fl. crimson. Alt. 11500 ft. 3600 m.

(5) 20741 "guarguín "
Scrub paramo. 4 m. shrub. Alt. 11,000 ft. 3475 m.

(4) 20742 "laurel"
Scrub paramo. 2 m. shrub; lvs. firm chartaceous; involucre green; fl. white, below tinged with magenta. Al. 11000 ft. 3475 m.

(3) 20743 "añil"
Scrub paramo. 3 m. shrub; lvs. subcoriaceous; fl. deep blue.
Alt. 11000 ft. 3475 m.

(7) 20744 "gallinazo"
Scrub paramo. Tree 8 m. x 2 dm.; lvs. coriaceous, shiny above; fl. white. Alt. 11000 ft. 3475 m.

(2) 20745 "apio paramo" strong
Scrub paramo. Herbage with/~~xxxxx~~ aroma of celery.
Medicine for stomach ache. Alt. 11000 ft. 3475 m.

(5) 20746 Moist spots in scrub paramo, but lower down in woods ~~xxxxx~~ growing 2 m. tall. Rays magenta-purple, disk yellowish then brown. Alt. 11000 ft. 3475 m.

(7) 20747 "bordón"
Scrub paramo. Tree 6 m. x d dm.; lvs. coriaceous. Alt. 11000 ft. 3475 m.
3dm. OK by WFA

(9) 20748 "pajarilla negra"
Scrub paramo. Involucre green; fl. white. Alt. 11000 ft. 3475 m.

(6) 20749 "jeta de caballo"
Scrub paramo. Shrub 4-10 dm. tall, common. Alt. 11,000 ft 3475 m.

(3) 20750 "ventocidad"
Scrub paramo. 1 m. shrub; lvs. coriaceous, thick; fl. white.
Alt.11,000 ft. 3475 m.

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(5) 20751 Scrub paramo. 2 m. shrub; lvs. subcoriaceous; involucre bracts green, the tips brownish; pubescence white; fl. yellow. Alt.11000 ft.
20752 -none 3475 m.
(10) 20753 "tangue"
Open paramo. 1 m. shrub; lvs. subcoriaceous, glaucous green; involucre green; fl. white. Alt. 12000 ft. 3750 m.

(11) 20754 "campanillita"
Scrub paramo. Fl. pale lavender. Alt. 11,000 ft. 3445 m.

(4) 20755 "calendula" 3750 m.
Open paramo. Rare, prostrate mats; fl. rose magenta. Alt. 12000 ft.
3750 m.
(3) 20756 Open paramo. Barely emerged in wet swale; fl. white. Alt. 12000 ft.

(5) 20757 In open paramo. Submerged in shallow ~~pxmtx~~ pool. Alt. 12000 ft. 3750 m.

(5) 20758 Wet swale in open paramo. Rays white. Alt. 12000 ft. 3750 m.

(2) 20759 " " " " " " " " " " 3750 m.

(3) 20760 Swamp in open paramo. Petals white. Alt. 12000 ft. 3750 m

(5) 20761 Wet swale in open paramo. Low tussocks in grassy places. Alt. 12000ft. 3750 m.

(4) 20762 Submerged in shallow pool in open paramo. Alt. 12000 ft. 3750 m.

(4) 20763 Wet swale, open paramo. Fl. white. Alt. 12000 ft. 3750 m.
"veronica"
(3) 20764 / Moist stream bank. Fl. blue. Alt. 10,600 ft. 3320 m.

(4) 20765 "polea"
Moist stream bank. ~~Spxm~~ Spearmint odor; fl. pale rose-violet.
Alt. 10,500 ft. 3290

(4) 20766 Open, grassy paramo. Fl. white. Alt. 11000 ft. 3445

(4) 20767 " " " . Abundant, almost stemless, herbage white hairy; fl. yellow. Alt. 11000 ft. 3445

(2) 20768 Rocky, open paramo, on upper main divide. Herbage and infl. reddish purple. Alt. 12000 ft. 3750 m.

(2) 20769 Open paramo on main divide. Petals white. Alt. 12000 ft. 3750 m.

(3) 20770 Open paramo. Common forming tussocks; corolla greenish white. Alt. 12000 ft. 3750 m.

(3) 20771 Open paramo on main divide. 1 m. shrub. Alt. 12000 ft. 3750 m.

(8) 20772 Paramo on main divide, under schist ledge. La Cruz de Las Peñas. Alt. 12000 ft. 3750 m.

(8) 20773 Open grassy paramo. Fl. bright yellow. Alt. 11000 ft. 3475 m.

(8) 20774 Open paramo. Erect tufts, reddish. Alt. 12000 ft. 3750 m.

(8) 20775 " " Fl. pale blue with dark blue veins. Alt. 12000 ft. 3750 m.

(9) 20776 " " Tufts, decumbent at base; fl. blue, standard white at center, standard ~~xxx~~ touching keel, not raised. Alt. 12000 ft. 3750 m.

(4) 20777 Open paramo, main divide, granite crevices. Alt. 12000 ft. 3750 m.

(3) 20778 " " " " , schist crevices. Bracts crimson, calyx green, corolla upper lip green with crimson border, lower lip green. Alt. 12000 ft. 3750 m.

(12) 20779 Open paramo. Trunks 1-2.5 dm. tall, 2 dm. diam.; fl. not openig wide, rays yellow, inconspicuous. Alt. 11500 ft. 3600 m.
Lemon

(7) 20780 Scrub páramo. Vine, climbing 3-6 m. over trees; lf. midrib ~~xxx~~ bright red beneath; pedicel & fl. parts carmine red. Alt. 10200 ft. 3200 m.

(7) 20781 Scrub páramo. 5 m. shrub; lvs. coriaceous, shiny; fl. white. Alt. 10200 ft. 3200 m.

(6) 20782 Scrub páramo. Epiphyte on mossy branch; lvs. fleshy, green; fl. whitish. Alt. 10200 ft. 3200 m.

(7) 20783 Scrub páramo. Vine climbing 3-8 m. over trees; lvs. chartaceous, shiny above, impressed nerved; veins reddish; calyx green; corolla scarlet, anthers lead-color. Alt. 10200 ft. 3200 m.

(6) 20784 Open páramo. L m. shrub; lvs. distichous, subcoriaceous; fl. yellow. Alt. 11100 ft. 3475 m.

(6) 20785 Wet swale in open páramo. Stems red; petals yellow, anthers orange. Alt. 11100 ft. 3475 m.

(5) 20786 Open páramo. Heads blue. Alt. 11100 ft. 3475 m.

(12) 20787 " " Fl. greenish white. Alt. 12250 ft. 3825 m.

(2) 20788 " " Fl. lemon yellow. Alt. 12250 ft. 3825 m.

(10) 20789 " " Fl. greenish. Alt. 12250 ft. 3825 m.

(3) 20790 " " Fl. white. " " " 3825 m.

(5) 20791 " " Fl. white; stems reddish. Alt. 12250 ft. 3825 m.

(5) 20792 " " Prostrate mats; petals white." " " 3825 m.

(4) 20793 " " in shallow pond. Lvs. & fl. floating; fl. yellowish. Alt. 12250 ft. 3825 m.

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(10) 20794 Open páramo, rocky stream bank. Petals tinged or veined with rose, especially without. Alt. 12500 ft. 3905 m.

(7) 20795 Open páramo, rocky stream bank. Hairs blackish; fl. lemon yellow. Alt. 12500. 3905 m.

(4) 20796 Open páramo, mossy wet place. Alt. 12500 ft. 3905 m

(6) 20797 " " , rocky stream bank. Fl. white. Alt. 12500 ft. 3905 m.

(5) 20798 " " , rocky stream bank. Herbage pure white lanate; Fl. lemon yellow. Alt. 12500 ft. 3905 m.

(7) 20799 Open páramo, on divide. Shrub, fl. white. Alt. 12700 ft. 3965 m.

(9) 20800 " " , in pass. Half buried in ground; corolla white with yellow eye, throat with magenta spots. Alt. 12700 ft. 3965 m.

(14) 20801 Open páramo, in pass. Plant pale green; fl. yellowish green. Alt. 12700 ft. 3965 m.

(11) 20802 Páramo, on wet shale ledges. Fl. dark magenta. Alt. 12300 ft. 3840 m.

(4) 20803 Open páramo. 1 m. shrub; calyx rose magenta; petals purple. Alt. 10250 ft. 3215 m.

(6) 20804 Open páramo. Fl. white. Alt. 10250 ft. 3215 m.

(4) 20805 " " " " " " " 3215 m.

(7) 20806 Thicket in stream gulch. Fl. orange-carmine. Alt. 7375 ft. 2282 m.

(2) 20807 " " " " . Fl. scarlet. Alt. 7375 ft. 2282 m.

(4) 20808 Wooded gulch. Fl. pink. Alt. 7375 ft. 2282 m.

(5) 20809 " " Fl. green. " " " 2282 m.

(5) 20810 " " Berries ovoid, red. Alt. 7375 ft. 2282 m.

(8) 20811 Thicket on hillside. 8 m. shrub; sap yellow; lvs. bluish green; glaucous white below. Alt. 6000 ft. 1843 m.

(5) 20812 Thicket on dry slopes. Tree 8 m. x 3 dm.; fl. deep blue. Alt. 4350 ft. 1340 m.
"cacao"

(8) 20813 / " " steep hillside. Tree becoming 10 m. x 8 dm.; lvs. thick chartaceous; ovary green; corolla tube without dull mahogany color, within greenish; capsules splitting from top. Alt. 4000 ft. 1230 m.

(9) 20814 Cut-over mt. side. Tree 6 m. x 1.5 dm.; sap orange; seed bluish; aril red. Alt. 5675 ft. 1747.

(6) 20815 Dense, temperate forest. Shrub 5 m. x 1 dm.; lvs. thick chartaceous; exposed parts perianth reddish or purplish brown, the rest green. Orange sap sparse, not staining hands. Alt. 9750 ft. 3046

(10) 20816 "pajarito" Thicket on steep slope. Shrub 6 m. x 5 cm.; fastigiate; orange sap

see next page

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very ~~xxxxx~~ sparse; lvs. chartaceous; perianth largely brownish red, or in part yellowish; anthers pale yellow; ovary glaucous greenish; stigmas brownish. Alt. 6800 ft. 2090

(7) 20817 Mossy, ~~xixxx~~ cloud land. Herb, stems fleshy, trailing, assurgent, buds orange; corolla yellow except for white base; berries white. Alt. 10600 ft. 3320

(8) 20818 "la nudo"
Remnant of forest along stream. Tree 8 m. x 2 dm.; corolla yellow. Alt. 10300 ft. 3230

(9) 20819 "chusco"
Woods by stream. Very ~~xxx~~ abundant; stems ~~x~~ arching to 8 m. long. Alt. 10300 ft. 3230

(3) 20820 Remnant of forest by stream. Epiphytic on mossy tree trunk; stems branching dichotomously; fl. greenish yellow; sepals slightly brownish tinged without. Alt. 10750 ft. 3365

(9) 20821 "ragué","campaño silvestre"
~~xixx~~ Forest remnant on steep slope. Tree 8 m. x 5 dm.;~~xx~~ sepals & petals rose-colored; fr. green, then brown. Alt. 11100 ft. 3475

(4) 20822 Mossy, cloud forest. Half climbing herb, 1-4 m. long; lvs. sub-carnose, impressed nerved above. Alt. 11700 ft. 3660

(6) 20823 "yerba mora"
Edge of virgin forest. Corolla white; fruits elliptic. Tubers not found. Alt. 11700 ft. 3660

(7) 20824 Thicket by stream. Wings blue with slightly darker veins; keel invisible, ~~xx~~ covered by the wings; ~~xxx~~ body whitish, subulate ~~xipx~~ tip blackish; in young fl. upper half of standard white with yellow blotch at center; upper half in older fls. rose magenta, lower half blue with darker veins; tip of standard raised at 45° to wings. Alt. 7350 ft. 2275

(4) 20825 Thicket on mountainside. 4 m. shrub, sap milky; infl. purplish red. pubescent; calyx purplish red, at base greenish; petals without purplish red, within paler to greenish. Alt. 10900 ft. 3415

(4) 20826 Thicket by stream. Young tree, white ~~xxix~~ hispid; sepals greenish white; petals white. Alt. 4750 ft. 1460

(11) 20827 "papayeulo"
Cult. on steep, dry, subtropical slope with Musa, Saccharum, Carica papaya, Manihot util., etc.
Stem 7 m. x 8 cm., without milky sap except for ~~x~~ few ~~xxxx~~ droplets in terminal bud; lvs. with segments chanelled; petioles, veins & veinlets ~~xxxxx~~ magenta; fr. pale yellow, magenta tinged, 12.5 cm. long x 5-6 cm. diam., with ~~x~~ blunt longit. ridges and 5 flat ridges. Flesh with taste of mild acid~~x~~ apple, pulp around seeds milder and more pleasant. Natives use flesh of fr. with sugar as a ~~xxxx~~ dessert. petals green on red disk at base, tips yellowish. ~~Only~~ This tree with female fl. only, no trace of stamens; Alt. 5100 ft. 1590

Photo + Seed spec.

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(12) 20828 Thicket by stream. Tree sprouts 5 m., from old root; lvs. thick chartaceous, above sublucid; fl. deep maroon; corolla lobes in bud valvate, tip x-section stellate, tube swollen near base; capsules loculicidal. Alt. 5200 ft. 1600 m

(6) 20829 Thicket by stream. Shrub 8 m. x 8 cm., common. (Also common from Armenia to Salamina.) Stem glaucous. With sparse orange sap, not issuing. Lvs. blue green above; panicles pendant. Alt. 4850 ft. 1490 m.

(5) 20830 Thicket by stream. Shrub 8 m. x 1 dm.; wood orange, almost no sap; perianth mahogany red or yellowish. Alt. 4800 ft. 1475

(9) 20831 Moist temperate woods on steep ridge. Vine, climbing 10 m. or more over trees; lvs. rigid chartaceous; infl., fl. are all madder. Alt. 8500 ft. 2645 m.

(10) 20832 Moist temperate forest. Tree 10 m. x 1 dm.; lvs. firm chartaceous; fl. white; corolla greenish white; tube distended at base; berries purplish. Alt. 8750 ft. 2720 m.

(7) 20833 Tangled shrubbery, wet, wooded stream gulch. Stems weak, 2-3 m. long, half sprawling; upper petioles purplish; leaflets thick chartaceous, soft; sepals pale, petals carmine; pendent capsules pale greenish. Alt. 7700 ft. 2385 m

(9) 20834 Wet, mossy, temperate forest. Stems reddish above, sprawling vine on shrub; lvs. thick chartaceous, magenta tinged or the veins magenta; peduncle & pedicels red; calyx magenta; corolla white, lobes slightly reflexed. Alt. 10600 ft. 3320 m.

(9) 20835 Wet, mossy, cloud forest. Vine 5 m. on tree; pubescence white; lvs. thick; ovary dark red; fl. carmine. Alt. 10800 ft. 3380 m.

(7) 20836 Moist, wooded valley. Tree. Alt. 7500 ft. 2325 m.

(7) 20837 " woods on mountainside. Lvs. chartaceous, shiny above; fl. carmine red. Alt. 9000 ft. 2805 m.

(4) 20838 Wet thicket by trail. Lvs. chartaceous, deeply impressed nerved; calyx purple. Alt. 9000 ft. 2805 m.

(6) 20839 Moist thicket by trail. 1.5 m. shrub; lvs. chartaceous, deeply impressed nerved; corolla white. Alt. 9000 ft. 2805 m.

(6) 20840 Moist thicket by trail. Lvs. thick chartaceous, impressed nerved; calyx rotate; corolla rose-magenta. Alt. 9500 ft. 2960 m.

(5) 20841 "canelo"
Moist, upper forest. Tree 9 m. x 2 dm.; lvs. subcoriaceous, shiny above, white below; petals white.

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(4) 20842 Wet, mossy upper woods. Vine; lvs. thick and soft; fl. salmon colored; fr. 3-angled, 6-ribbed, truncate. Alt. 10500 ft. 3290 m.

(6) 20843 Wet, mossy upper forest. Tree 10 m. x 2 dm.; lvs. coriaceous; fl. white. Alt. 11000 ft. 3445 m.

(6) 20844 Wet, mossy cloud forest. Pendent from mossy tree trunk. Alt.11000 ft. 3445 m.

(7) 20845 Thicket. Tree 5 m. x 15 cm.; lvs. chartaceous, hairy tufts castaneous, branchlets castaneous appressed villos; capsules green and fleshy, shriveling and drying hard and brown. Alt. 8850 ft. 2750

(6) 20846 Wet temperate forest, with Palicourea, tree ferns, corozo palms, etc. Female tree 4 m. x 8 cm., said to attain 12 m. x 15 cm.; milky sap abundant. Lvs. thick chartaceous; fl. white; fr. 6-8 x 5-6 cm., with 5 double fluted ridges, orange color. Alt. 7900 ft. 2445 m.

(4) 20847 Moist, temperate forest. Male tree, 4 m. x 8 cm.; fl. white, faint perfume of pppper. Alt. 7900 ft. 2445 m.

(5) 20848 "uvita"
2 m. shrub; lvs. coriaceous; petals orange. Alt. 11500 ft. 3600 m.

(1) 20849 Mossy, wet upper woods. Basal half of lateral petals and basal quarter of lip chocolate brown, the remainder of fl. golden yellow. Alt. 11400 ft. 3565 m.

(5) 20850 "pepino de monte"
Wet mossy, cloud forest. Common; lvs. chartaceous, red-veined above; fl. carmine red. Alt. 11600 ft. 3630 m.

(4) 20851 "anisillo"
Wet mossy, upper woods. Herb 2 m. tall; fl. white. Alt. 11600ft. 3630 m.

(5) 20852 "verde-negro"
Wet, mossy upper forest. 5 m., drooping shrub; fl. white. Alt. 11250 ft. 3520 m.

(4) 20853 Forming mats on mossy banks or fallen trees in open. Lvs. thick, fleshy, concave; petals slightly pale greenish, opaque; berries 3/ 3-4 mm. diam., depressed spheroidal, mahogany colored. Alt. 10600 ft. 3320 m.

(1) 20854 Mossy, elfin forest. Epiphyte on tree trunk; sepals madderp petals with yellow claw and madder midrib; claw mostly green with madder spots; midrib madder. Alt. 11870 ft. 3711 m.

(2) 20855 Mossy, elfin forest. Epiphyte on trees; sepals yellow or slightly maculate; petals yellow with large chocolate spots. Alt.11500 ft. 3600 m.

(11) 20856 "melena verche"
Mossy elfin forest. Epiphyte, 2 m. long, hanging in great bunches 5 dm. long. Alt. 11850 ft. 3705 m

(7) 20857 Weed tree by fence rows, and common volunteer in pastures.
Tree 7 m. x 1 dm.; lvs. red-veined, turning red; fl. pink. Alt.1940 m.

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(2) 20858 Moist, temperate forest with tree ferns, feather palms, Chusquea, etc. Corolla scarlet. Alt. 10400 ft. 3260 m.

(3) 20859 Moist thicket. El. 9500 ft. Fl. scarlet. 2960 m.

(3) 20860 Terrestrial in lichen covered patch, scrub paramo . Lvs. coriaceous; fl. greenish. Alt. 10100 ft. 3165 m.

(3) 20860a

(4) 20861 Scrub páramo. Clump, terrestrial; fl. burnt-orange. Alt. 10100 ft. 3165 m.

(4) 20862 " " Terrestrial; fl. magenta pink; lvs. subcoriaceous, erect, fluted. Alt. 10100 ft. 3165 m.

(6) 20863 Scrub páramo. Caespitose; fl. yellow. Alt. 10100 ft. 3165 m.

20864 } Don't type label
20865 }

(4) 20866 Moist temperate forest. Herb 1-5 m. tall; young shoots bright with purple pubescence. Alt. 9500 ft. 2960 m.

(5) 20867 Dense temperate forest on ridge. 1 m. shrub; fl. white. Alt.10950 ft. 3430 m.

(3) 20868 Temperate forest with Chusquea, on ridge. 1 m. decumbent shrub; perianth green, androecium dark purple. Alt. 11000 ft. 3445 m.

(4) 20869 Wet moss on steep limestone cliff, ~~xxp~~ subpáramo. Fl. blue except lower tube and spur whitish with blue veins. Alt. 11250 ft. 35-20 m. "oreja de mula"

(11) 20870 /Remnant of temperate forest, E. side of gulch. Tree 15 m. x 8 dm.; fl. pink. Alt. 8800 ft. 2735 m.

(6) 20871 Thicket by gulch. 4 m. sprout tree; lvs. thick chartaceous; corolla tube mahogany brown without, within and lobes pale green; capsule dark brown, splitting from above. Alt. 3300 ft. 1015 m.

(9) 20872 "cascarilla"
Remnants of forest in gulches with Vismia, white Cecropia, etc.
Fl. pink but margins of lobes white; cymes 6 dm. long; fr. splitting from below. Alt. 6400 ft. 1970 m.

(4) 20873 Occasional in temperate forest with white Cecropia, "riñon," ~~xxxxx~~ "azucena", etc. Tree 20 m. x 2 dm. No fl. found but fr. abundant. Lv. thick chartaceous, veins red; old lvs. red. Alt. 6800 ft. 2090 m.

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(4) 20874 Moist temperate forest. Lvs. subcarnose, dull shiny above; fl. carmine; berries elliptic, white or flesh color. Alt. 8500 ft. 2645m.

(5) 20875 Moist temperate forest. Epiphyte on mossy trunk; sepals pale lavender-chocolate mostly from the chocolate pubescence; petals & especially the lip dark chocolate brown; fragrance slight. Alt. 9100 ft. 2835m.

(2) 20876 Epiphyte; Perianth ground color and tips of all divisions white; hypochil with lower 2/3 streaked almost solid with magenta; mesochil with ~~maximum~~ saliant linear cylindric processes, white; epichil magenta tinged below the magenta spotted tip; other perianth parts magenta spotted except at tip. Flowers with delightful sweet fragrance. Alt. 9800 ft. 3060 m.

(5) 20877 Moist, temparate forest. 1.5 m. shrub in forest opening; lvs. thick chartaceous; pubescence white, ascending; fl. orange. Alt. 9950 ft. 3105 m.

(4) 20878 Alt. 10000 ft. 3135 m.

(5) 20879 Moist temperate forest. Epiphyte on mossy trunk; fl. dark madder brown. Alt. 10000 ft. 3135 m.

(5) 20880 "uvitas"
Corolla firm & fleshy, tubes crimson, lobes green. Alt. 10000 ft. 3135 m.

(3) 20881 Moist temperate woods. Epiphyte on mossy trunk; fl. greenish tinged, spotted with madder. Alt. 10000 ft. 3135 m.

(3) 20882 Moist temperate woods. Epiphyte on tree trunk. Perianth translucent flesh-colored, veined with magenta. Alt. 9500 ft. 2960 m.
"mancha de sangre".

(4) 20883 / Moist temperate forest. Usually at mossy base of trunks; plant 1-2 m. long, arching; bracts pale green; lvs. fleshy, crimson spots below; corolla tube carmine, lobes yellow. Alt. 10100 ft. 3165 m.

(2) 20884 Moist temperate forest. Epiphyte on mossy trunks; base of sepals magenta-tinged. Alt. 9300 ft. 2900 m.

(4) 20885 Moist ledges, opening in forest. Corolla scarlet, lvs. chartaceous. Alt. 6700 ft. 2060 m.

(6) 20886 Mossy open, shale ledge in temperate forest. Terrestrial; bracts crimson; perianth yellow. Alt. 7100 ft. 2200 m.

(4) 20887 Damp stream gorge. 3 m. shrub; fl. orange. Alt. 6900 ft. 2125 m.

(4) 20888 Epiphyte on mossy trunk hanging over gorge. Fl pendent, deep rose-color. Alt. 6900 ft. 2125 m.

(6) 20889 "papayo". Male
Cult. tree, by ~~finca~~ finca. ~~Female~~/tree 8 m. x 2 dm.; milky sap thin, fairly abundant; blades thick chartaceous; male inflor. axillary; fl. green. Female trees also present. Alt. 7050 ft. 2175

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(4) 20890 "raque"
Upper temperate forest with Oreopanax, Chusquea, etc.
Tree 10 m. x 1 dm.; no flowers or fruit found. Alt. 11000 ft. 3475 m.

(12) 20891 "melena"
Upper forest with Oreopanax and Vallea. On mossy trunks and ground; tips assurgent. Alt. 12000 ft. 3750 m.

(7) 20892 "manzano"
Upper forest with "encenillo". Small tree; lvs. chartaceous; buds pink. Alt. 11500 ft. 3600 m.

(6) 20893 "manzano"
Upper forest. Tree 7 m. x 1 dm.; fr. white or pinkish, subcarnose, turning brown and shrinking on drying; endocarp crimson. Alt. 11500 ft. 3600 m.

(5) 20894 Elfin forest. Epiphyte on mossy branch; perianth white; stem fleshy, leaves coriaceous, 2-ranked. Alt. 11800 ft. 3690 m.

(4) 20895 Shrub 5 m. tall; lvs. subcoriaceous; fl. white. Alt. 11800 ft. 3690 m.

(11) 20896 "cenizo"
Upper elfin forest. Small, round-topped tree 6 m. x 2 dm.; lvs. subcoriaceous, shiny above, below tawny hairs; fl. yellow. Alt. 11800 ft. 3690 m.

(4) 20897 Marshy páramo. Lvs. fleshy; calyx and corolla magenta. Alt. 12000 ft. 3750 m.

(3) 20898 In páramo. Abundant; lvs. tawny hairs; fl. yellow. Alt. 12400 ft. 3870 m.

(7) 20899 Uppermost elfin forest. Round-topped tree 5 m. x 2 dm.; lvs. subcoriaceous; fl. white. Alt. 12300 ft. 3840 m.

(7) 20900 Upper elfin forest. Vine climbing and pendent; lvs. chartaceous; fl. deep rose-color, anthers lead-color. Alt. 11000 ft. 3475 m.

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COLOMBIA CINCHONA MISSION DATA

Collector: Harold St. John

Ask E wan if det are OK
If so add auth. names
make straight numer. list

~~add~~ no spec t took Bg

1. Physical geography—Pyrénées orientales franco-espagnoles.

42–44889

Library of Congress GB543.P8B5

[2]

**Chauchard, Paul.**

... Études physico-chimiques sur les eaux de la Rance canalisée (appréciation de la salinité par la méthode conductimétrique) ... Cahors, Imprimeries typographique A. Coueslant, 1939.

112 p. incl. illus., tables, diagrs. 24½cm.

Thèse (2me)—Univ. de Paris.

"Bibliographie": p. 111–112

Some nos 20864 — 5

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Virginia

no. 20540

20588

20589

may 20, 1947

det. H. St. John

# FOREIGN ECONOMIC ADMINISTRATION

Colombian Cinchona Mission 1944
Plant Collection Number List

Harold St. John

Note: Blank spaces in the list following full data indicate ditto marks or that the data is the same as for the previous entry. Common names are in quotes.

| Number | Name | Locality | Date |
|---|---|---|---|
| 20501 | Ruppia | Paiba, Boyacá | May 7, 1944 |
| 20502 | Solanum | Apulo, Rio Bogota, Cundinamarca | June 12, 1944 |
| 20503 | Ruellia tuberosa L. | | |
| 20504 | Ruellia obtusa Nees | | |
| 2 0505 | Solanum crotonifolium HBK. | | |
| 20506 | Tournefortia hirsutissima L. | | |
| 20507 | Guazuma ulmifolia var. tomentosa (HBK.) Schum. | | |
| 20508 | Capparis oderotissima Jacq. | Apulo, Rio Apulo, Cundinamarca | June 13, 1944 |
| 20509 | Casearia nitida (L.) Jacq. | | |
| 20510 | Croton leptostachys HBK. | | |
| 20511 | Mappighia glabra L. | | |
| 2 0512 | Cassia mutisiana Kunth. aff. | Ubaque, Cundinamarca, | June 17, 1944 |
| 20513 | Cassia (HBK.) Hoer. | Choachí, Cundinamarca, | June 17, 1944. |
| 20514 | Cavendishia cordifolia | Páramo de Cruz Verde, 15 Km. S. of Bogotá, Cundinamarca | June 17, 1944 |
| 20515 | Macleania rupestris (HBK.) Smith | | |
| 20516 | Carica candaramarcensis | Bogotá, Cundinamarca | June 22, 1944 |
| 20517 | Cuphea dipetala | 1 Km. N. of Sibaté, Cundinamarca | June 23, 1944 |
| 20518 | Monina | | |
| 20519 | Dodonaea viscosa | | |
| 20520 | Peperomia | | |
| 20521 | Lupinus | | |
| 20522 | Nertera granatensis | | |
| 20523 | (Acanthaceae) Besleria? | | |
| 20524 | Begonia magnifica | | |
| 20525 | Gunnera scabra | | |
| 20526 | Jamesonia | | |
| 20527 | Liabum | | |
| 20528 | Fuchsia | | |
| 20529 | Columnea | | |
| 20530 | Palicourea | on road, 15 Km. N. E. of Fusugasugá, Rio Subia, Cordillera Oriental, Cundinamarca | June 23, 1944 |
| 20531 | Palicourea | | |
| 20532 | Palicourea | | |
| 20533 | Ciperouna | | |
| 20534 | Carica candaramarcensis | Bogotá, Cundinamarca | June 24, 1944 |
| 20535 | (Compositae | San Cristobal, Bogotá, Cundinarca, | June 25, 1944. |
| 20536 | Stachytarpheta | 1 Km. N. of Cite, Cordillera Oreintal, Santander | June 28, 1944. |
| 20537 | (Melastomaceae | 13 Km. S. of Oiba, Cordillera Oriental Santander, | June 28, 1944 |

20538 Cassia — 18 Km. S. of Socorro, Cordillera Oriental, Santander, June 28, 1944

20539 Baccharis
20540 Vismia
20541 Myrsine
20542 ~~Melastomaceae~~ — 14 Km. S. of Socorro, Cordillera Oriental, Santander, June 28, 1944

20543 ~~Compositae~~
20544 Leonotus — Pescadero, Rio Chicamocha, Cordillera Oriental, Santander, June 28, 1944.

20545 Tournefortia
20546 Tournefortia
20547 ~~Moraceae~~
20548 Brickellia
20549 Adiantum — 3 Km. E. of Boca de Chucurí, Rio Sogamoso, Cordillera Oriental, Santander, June 29, 1944

20550 tree; lvs. alt.; fr. like acorn
20551 Psychotria
20552 Remijia pedunculata (with bark sample) — "Quina colorada", Filo de Lemir, La Putana, Cordillera de La Paz, Santander, July 6, 1944
20553 Remijia pedunculata — "Quina colorada" (with bark sample)
20554 ~~Bromeliaceae~~ — cascade of Quebrada Boquerona at confluence with Quebrada La Putana, Cordillera de La Paz, Santander, July 7, 1944.

20555 Isertia ~~or Cassupa~~
20556 ~~Rubiaceae~~
20557 Psychotria
20558 ~~Lobeliaceae~~ vine
20559 ~~Gesneriaceae~~
20560 Palicourea
20561 ~~Gentianaceae~~ — W. side of Cordillera de La Paz, summit of Llana-Boquerona trail, Santander, July 7, 1944.
2 0562 tree lvs. opp. cor. gam. — Quebrada Llana, E. side Cordillera de La Paz, Santander, July 7, 1944.
20563 Cephaelis — near summit, W. side of Cordillera de La Paz, Quebrada Boquerona, Santander July 7, 1944.

20564 Sphagnum
20565 ~~Acanthaceae~~
20566 Remijia pedunculata (with bark sample) — "Quinon" Finca Maravilla, Las Cruces, 3 Km. E. of San Vicente de Chucurí, Cuchilla del Ramo, Santander, H. St. John & Damaso Ramirez, July 5, 1944
2 0567 Remijia pedunculata (with bark sample) — "Quina roja" Alto de Consuelo, Cordillera de La Paz, Santander, H. St. John & Gustavo Arcila, July 19, 1944.
20568 Remijia pedunculata — "Quina roja" (with bark sample)
20569 Remijia pedunculata — "Quina roja" (with bark sample)
20570 ~~Euphorbiaceae~~
20571 Ladenbergia — "Quinon"(with bark sample)
20572 ~~Liliaceae~~ — Filo Lorene, E. side of Cordillera de La Paz, Santander, H. St. John, July 20, 1944

note on coll. sheet

20573 Pentagonia — Filo Lorene, E. side Cordillera e La Paz, Santander, H. St. John, July 20, 1944.
20574 Isertia or ~~Cassupa~~ (Bark sample) — Filo de Alto Viento, E. side Cordillera de La Paz, Santander, H. St. John & Gustavo Arcila, July 21, 1944
20575 Remijia pedunculata (Bark sample) — "Quina colorada" ridge between Filo de Alto Viento and Auebrada La Honda, E. side of Cordillera de La Paz, H. St. John & Gustavo Arcila, July 21, 1944
20576 Remijia pedunculata — "Quina colorada" (Bark sample)
20577 Palicoures — Filo de Alto Viento, E. side of Cordillera de La Paz, Santander, H. St. John July 21, 1944.
20578 Scrophulariaceae
20579 Cephaelis brachiata
20580 Gonzalagunia
20581 Rubiaceae
20582 Rubiaceae
20583 Psychotria
20584 Passiflora — Quebrada La Llana, Nuevo Mundo, Cordillera Oriental, Santander July 25, 1944.
2 0585 Rubiaceae
20586 Gesneriaceae near Saint-Paulia
2 0587 Apocynaceae
20588 Vismia — "Manchador" Quebrada Ángulo, 4 Km. S. of Lebrija, Cordillera Oriental, Santander, July 29, 1944
20589 Vismia
20590 Jussiaea
20591 Compositae Brickellia?
20592 Rubiaceae
20593 tree, superior ovary
20594 tree monoecious — "machanillo"
20595 Clusia — "gachi"
20596 Orchidaceae
20597 Saparuna
20598 Melastomaceae
20599 Cephaelis
20600 Solanaceae
20601 Rubiaceae
2 0602 Piper — 4 Km. S. of Cantabria, Cordillera Oriental, Santander, July 29, 1944
20603 Solanum tree
20604 Melastomaceae shrub, páramo, 15 Km. W. of Berlin, Cordillera Oriental, Santander, July 30, 1944.
20605 Senecio
20606 Xyris
20607 Espeletia
20608 Begonia — páramo, 8 Km. E. of Berlin, Cordillera Oriental, Santander, July 30, 1944
20609 Calceolaria
20610 Viola
20611 Galium
20612 Gunnera
20613 Siphocampylus Funckeanus Planch., vel affin. det. R. McVaugh

20613 Lobeliaceae subparamo, subparamo, 5 Km. E. of ---- -
20614 Calycophyllum hirsutus "Quinon" ridge S. E. of Esmeralda, S.side of Rio Sogamoso, Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 2, 1944
20615 Remijia pedunculata "Quina blanca" (Bark sample)
20616 Remijia pedunculata "Quina blanca" (Bark sample)
20617 Remijia pedunculata "Quina blanca" (Bark sample) W. side of main ridge, Cordillera de La Paz, S. side of Rio Sogamoso, Santander, H. St. John & G. Arcila July 2, 1944.
20618 Remijia pedunculata "Quina blanca" (Bark sample)
20619 Remijia pedunculata "Quina blanca" (Bark sample) N. W. end of Cordillera de La Paz, S. of Rio Sogamoso, Santander, H. St. John & G. Arcila Aug. 2, 1944
20620 Remijia pedunculata "Quina blanca" (Bark sample)
20621 Remijia pedunculata "Quina blanca" (Bark sample) W. side of N. end of Cordillera de La Paz, S. side of Rio Sogamoso, S. E. of Esmeralda, Santander, H. St. John & G. Arcila, Aug. 3, 1944.
20622 Remijia pedunculata mass collection of sterile branches of 20621
206223 Remijia pedunculata mass collection of flowers of 20621
20624 Remijia pedunculata mass collections of fruit of 20621
20625 Remijia pedunculata "Quina blanca" (Bark sample)
20626 Remijia pedunculata "Quina blanca" (Bark sample)
20627 Remijia pedunculata "Quina blanca" (Bark sample) Filo San Pablo, S. end of N. part of Cordillera de La Paz, E. of Esmeralda, Santander, H. St. John & G. Arcila, Aug. 4, 1944
20628 Remijia pedunculata "Quina blanca" (Bark sample)
20629 Remijia pedunculata "Quina blanca" (Bark sample)
20630 Remijia pedunculata "Quina blanca " (Bark sample)
20631 Leguminosae tree, red fl; "Arisa"
(2) 20632 Passiflora "Granada"
20633 Remijia pedunculata "Quina" (Bark sample) W. side of Cerro de Santa Barbara, Quebrada, Caimana, drainage of Rio Sucio, N. half of Cordillera de La Paz, H. St. John & G. Arcila, Santander, Aug. 12, 1944
20634 Remijia pedunculata "Quina tuna" (Bark sample) W. side of Cerro Arenosa, Quebrada Arenosa, drainage of Rio Sucio, N. half of Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 14, 1944
20635 Ladenbergia "Quina tuna" (Bark sample)
20636 Ladenbergia "Quina tuna" (Bark sample)
20637 Remijia pedunculata "Quina tuna" (Bark sample)
20638 Remijia pedunculata "Quina tuna" Quebrada Caimana, drainage of Rio Sucio, W. side of N. half of Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 15, 1944.
20639 Remijia pedunculata "Quina tuna" (Bark sample) W. side Alto Frio, W. of Naranjo, Cordillera de La Paz, Santander, H. St. John & G. Arcila, Aug. 15, 1944.
20640 Remijia pedunculata "Quina tuna" (Bark sample)

20641 Calycophyllum "Quinon" (Bark sample) Quebrada Caimana, drainage of Rio Sucio, W. side of N. half of Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 16, 1944

20642 Remijia pedunculata "Punta de lanza" (Bark sample) Filo San Carlos, N. end of N. half of Cordillera de La Paz, 5 Km. S. of El Volador, Santander, H. St. John & G. Arcila Aug. 17, 1944.

20643 Remijia pedunculata "Punta de lanza" (Bark sample)

20644 Remijia pedunculata "Punta de lanza" (Bark sample)

20645 Cattleya Arenal, Chicamocha Valley, Cordillera Oriental, Santander, H. St. John Aug. 19, 1944.

20646 Cattleya

20647 Rubiaceae Quebrada El Pato, El Cidro, Rio Pómera, 11 Km. E. of Moniquira, Cordillera Oriental, Boyaca, Aug. 20, 1944

20648 Solanum

20649 Solanaceae

20650 Galinsoga

20651 Rubiaceae

20652 Palicourea

20653 Piper

20654 Compositae

20655 Solanum

20656 Solanum

20657 Rubiaceae

20658 Ericaceae

20659 Rubiaceae

20660 Cucurbitaceae

20661 Bomarea

20662 Araceae

20663 Begonia

20664 Liliaceae? "Guiche"

20665

2 0670 Ericaceae "Uva" valley of Rio Pómera, 13 Km. E. of Moniquira, Cordillera Oriental, Boyaca, Aug. 20, 1944

20671 Ilysanthes La Cumbre, 14 Km. N. W. of Arcabuco, Rio Pómera, Cordillera Oriental, Boyaca, Aug. 20, 1944

20672 Orchidaceae

20673 Bignoniaceae canyon of Rio Pómera, 13 Km. N. W. of Arcabuco, Cordillera Oriental, Boyaca, Aug. 20, 1944

20674 Habenaria

20675 Compositae shrub

20676 Leguminosae, vine black buds

20677 Bromeliaceae

20678 Solanum 12 K. N. W. of

20678 Gentianaceae, shrub fl. yellow) specimen to be destroyed

20679 Zygophyllaceae ?

20680 Thalictrum podocarpum male 8 Km. N. W. of

20681 Thalictrum podocarpum female

20682 Potamogeton

20683 Galinsoga parviflora 4 Km. S. of Cota, Bogotá Sabana, Cundinamarca, Aug. 27, 1944

20684 Galinsoga
20685 Compositae
20686 Capparis
20687 Galinsoga caracasana 4 Km. S. of Cota, Bogotá Sabana, Cundinamarca, Aug. 27, 1944.

20688 Galinsoga
20689 Hedyotis 2 Km. N. of Combita, Valley of Rio Grande, Cordillera Oriental, Boyacá, Sept. 1, 1944.

20690 Vernonia ?
20691 Ericaceae
20692 Lycopodium
20693 Vicia
20694 Halenia
20695 Hypericum
20696 Castilleja
20697 Antennaria
20698 Orthosanthes chimboracensis
20699 Orthocarpus
20700 Orchidaceae
20701 Ageratum ?
20702 Ranunculus
20703 Poa
20704 Compositae
20705 Vallea?
20706 Rubus
20707 Acaena
20708 Labiatae
20709 Hypericum
20710 Hypericum
20711 Ericaceae
20712 Ericaceae
20713 Compositae Actinea ?
20714 Compositae yellow
20715 Erigeron
20716 Myrsine
20717 Croton Canyon of Rio Chicamocha, opposite Pescadero, Cordillera Oriental, Santander, Sept. 1, 1944.

20718 Verbenaceae
20719 Solanum
20720 Funastrum pubescens (HBK.) Schltr.
20721 Amphilophium, near paniculatum (L.) HBK.
20722 Salvia, near bogotensis
20723 Calotropis procera (Ait.) R.Br.
20724 Cuscuta Matanza, Rio Surata, Cordillera Oriental, Santander, Sept. 7, 1944
(Jacq.) Cass.
20725 Porophyllum ruderale 13 Km. above mouth of Rio Surata, Cordillera Oriental, Santander, Sept. 8, 1944
20726 Pilea serpyllaceae of microphylla?
20727 Malpighiaceae
20728 Leguminosae vine
20729 Malpighiaceae vine
L.
20630 Bocconia frutescens 25 Km. above mouth of

| | | |
|---|---|---|
| 20731 | Salix Humboldtiana Willd. | |
| 20732 | Paullinia | |
| 20733 | Dioscorea polyneuroides H. et B. | |
| 20734 | Boehmeria caudata Sw. | |
| 20735 | Chamaefistula angustata Britt. et Killip cfr. | |
| 20736 | Senecio | |
| 20737 | Weinmannia | "Cascara" Pais, Rio de La Baja, Cordillera Oriental, Santander Sept. 13, 1944 |
| 20738 | Barnadesia spinosa | "Espino tate quieto" |
| 20739 | Compositae | "jarilla" |
| 20740 | Ericaceae | "Sepo" |
| 20741 | Compositae | "Guarguin" Motocoro, 2 Km. S. of Vetas, Rio Surata, Cordillera Oriental, Santander, Sept. 15, 1944 |
| 20742 | Baccharis | "Laurel" |
| 20743 | Monina | "Anil" |
| 20744 | Lauraceae? | |
| 20745 | Apium ? | "Apio páramo" |
| 20746 | Compositae | "Arnica" |
| 20747 | Myrsine | "Bordon" |
| 20748 | Compositae | "Pajarilla negra" |
| 20749 | Calceolaria | "Jeta de caballo" |
| 20750 | Compositae | "Ventocidad" |
| 20751 | Senecio | |
| 20752 | Lobelia | "Veronica" |
| 20753 | Senecio | "Tanque", Páramo Rico, 5 Km. S. of California, Cordillera Oriental, Sept. 15, 1944. |
| 20754 | Geranium | "Campanillita" |
| 20755 | Hydrophyllaceae? | "Calendula" |
| 20756 | Lobeliaceae | |
| 20757 | Ranunculus | |
| 20758 | Senecio formosus | |
| 20759 | Compositae | |
| 20760 | Ranunculus | |
| 20761 | Eriocaulon | |
| 20762 | Callitriche | |
| 20763 | Halenia | |
| 20764 | Veronica | Vetas, Cordillera Oriental, Santander, Sept. 15, 1944 |
| 20765 | Labiatae | |
| 20766 | Compositae | Páramo de Saturbán, Cordillera Oriental, Santander, Sept. 16, 1944 |
| 20767 | Espeletia | |
| 20768 | Lamourouxia | |
| 20769 | Azorella new? | |
| 20770 | Halenia | |
| 20771 | Compositae | |
| 20772 | fern | |
| 20773 | Sisyrinchium bogotense | |
| 20774 | Lycopodium | |
| 20775 | Gentianaceae | |
| 20776 | Lupinus | |
| 20777 | Luzula racemosa | |
| 20778 | Castilleja | |
| 20779 | Espeletia | |

FOREIGN ECONOMIC ADMINISTRATION

20780 Fuchsia — 15 Km. S. of Chitaga, Norte de Santander, Cordillera Oriental, 10,200 ft. Sept. 24, 1944

20781 Ericaceae
20782 Orchidaceae
20783 Lobeliaceae
20784 Hypericum — 20 Km. S. of 11,100 ft.

20785 Melastomaceae
20786 Eryngium humile var.
20787 Halenia — 5 Km. N. of Alto de Almorzadero, Chitaga Valley, Cordillera Oriental, Santander, 12,250 ft. Sept. 24, 1944

20788 Compositae
20789 Halenia
20790 Hypochoeris setosa
20791 Valeriana vetasana or longifolia
20792 Arenaria muscifolmis
20793 Ranunculus
2 0794 Cardamine — 1 Km. N. of Alto de Almorzadero, Chitaga Valley, Cordillera Oriental, Santander, 12,500 ft. Sept. 24, 1944

20795 Hieracium
20796 Lycopodium Selago ?
20797 Cerastium arvense ?
20798 Senecio almorzaderonis or niveo-aureus
20799 Compositae — Alto de Almorzadero, Chitaga Valley, Cordillera OrientalSantander, 12,700 ft. Sept. 24, 1944.

20800 Lysipoma acaulis
20801 Orthocarpus
20802 Epilobium
20803 Cuphea — 3 Km. S. of Tunja, Cordillera Oriental, Boyaca, 12,250 ft. Sept. 24, 1944

20804 Compositae
20805 Paepalanthus petraeus
20806 Fuchsia venusta HBK. — Salto de Tequendama, Rio Bogota, Cordillera Oriental, Cundinamarca, Oct. 1, 1944

20807 Centropogon
20808 Begonia microphylla a.DC.
20809 Tovaria pendula a.et P.
20810 Solanaceae
20811 Bocconia
20812 Jacaranda — 5 Km. S. W. of Arbelaez, Rio Cuja, Cundinamarca, Oct. 6, 1944

20813 Macrocnemum — 1 Km. N. W. of Coello, Rio Coello, Cordillera Central, Tolima, Oct. 7, 1944

20814 Bocconia — 1 Km. E. of Cajamarca, Cordillera Central, Tolima, Oct. 7, 1944.

20815 Bocconia — 2 Km. E. of Depresion, Cordillera Central, Caldas, Oct. 7, 1944.

20816 Bocconia — "Pajarito" 4 Km. E. of Manizales, Rio Chinchina, Cordillera Central, Caldas, Oct. 10, 1944

20817 Psychotria — El Bosque, Km. 28, Manizales-Mariquita Highway, Cordillera Central, Caldas Oct. 17, 1944

20818 Iochroma aff. gesnerioides — Quebrada de Peñas Blancas, N. of Km. 29, Manizales-Mariquita Highway, Cordillera Central, Caldas Oct. 18, 1944.

20819 Chusquea Lehmanni Pilger(?)

20820 Orchidaceae

20821 Vallea stipularis var.

20822 Begonia — Quebrada La Paila, 2 Km. N. of Km. 28, Manizales-Mariquita Highway, Cordillera Central, Caldas Oct. 18, 1944.

20823 Solanum — "Yerba mora"

20824 Lupinus — Rio Chinchina, Km. 12, Highway E. of Manizales, Cordillera Central, Caldas, Oct. 19, 1944.

20825 Centropogon aff. foetidus — Quebrada Termales, 5 Km. N. by road of Termales, Rio Chinchina, Cordillera Central, Caldas, Oct. 19, 1944.

20826 Saurauia brachybotrys var. macrantha Busc. — Rio Tapias, S. W. of Aranzazu, Caldas Oct. 22, 1944.

20827 Carica Goudotiana T. et P. — "papayuelo" Union, Rio Chamberi, Cordillera Central, Caldas, Oct. 22, 1944.

20828 Macrocnemum

20829 Bocconia — Quebrada Honda, 5 Km. S. W. of Aranzazu, Cordillera Central, Caldas, Oct. 22, 1944.

2 0830 Bocconia — "Curador" Rio Tapias, 5 Km. N. of Neira, Caldas, Oct. 22

20831 (Rubiaceae) vine — Filo de La Selva, S. of Rio San Eugenio, Cordillera Central, Caldas Oct. 26, 1944.

20832 (Rubiaceae)

20833 Cleome — Chaquiro Mine, Rio San Eugenio, Cordillera Central Oct. 26, 1944

20834 (Rubiaceae) — Chaquiro-Páramo de Santa Rosa trail, S. of Chaquiro Falls, Rio San Eugenio, Cordillera Central, Oct. 28, 1944

20835 (Acanthaceae) of (Gesneriaceae)

20836 tree alt. lvs. berries

20837 Fuchsia Hartwegi Benth.

20838 Physalis ?

20839 (Solanaceae)

20840 (Acanthaceae)

20841 Drimys — "Canelo"

20842 Bomarea

20843 (Rubiaceae)

20844 Hymenophyllum

20845 Vallea stipularis var. pubescens — 3 K. S. W. of Sibate, Rio Muña, Cundinamarca Nov. 5, 1944.

20846 Carica (female) — "Papaya de monte" San Ramón-San Eugenio ridge, 15 Km. E. of Santa Rosa de Cabal, Cordiller Central, Caldas Nov. 13, 1944.

20847 Carica (male) — "

20848 Berberis — "Uvita" Campoalegre-San Ramón Ridge, Termales-Santa Isabal trail, E. of Santa Rosa de Cabal, Cordillera Central, Caldas Nov. 15, 1944

20849 (Orchidaceae)

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| 20850 Fuchsia | "Pepino de monte" | Campoalegre-San Ramon Ridge, T Termales-Santa Isabel trail, E. of Santa Rosa de Cabal, Cordillera Central Nov. 15, 1944. |
| 20851 Umbelliferae | "Anisillo" | |
| 20852 Viburnum | | |
| 20853 Nertera | Depresion, Cordillera Central | Nov. 18, 1944. |
| 20854 Liliaceae | Mt. N. of Quebrada Venus, E. of Armenia, Cordillera Central | Nov. 21, 1944. |
| 20855 Orchidaceae | | |
| 20856 Lycopodium | "Melena verde" | |
| 20857 Cinchona pubescens | 5 Km. N. of Circasia, Caldas | Nov. 22, 1944. |
| 20858 Centropogon | Filo Cachirí, W. of Quebrada Termales, Rio Chinchina, Cordillera Central | Nov. 24, 1944. |
| 20859 Centropogon | | |
| 20860 Orchidaceae | | |
| 20861 Orchidaceae | | |
| 20862 Orchidaceae | | |
| 20863 Orchidaceae | | |
| 20864 Gunnera | | |
| 20865 Gunnera | | |
| 20866 Gynandropsis | Quebrada Romeral, Rio Chinchina, Cordillera Central | Nov. 26, 1944. |
| 20867 Palicourea | | |
| 20868 Centropogon | | |
| 20869 Pinguicula | | |
| 20870 Cinchona pubescens | "Oreja de mula" (Bark sample) W. side of Quebrada Termales, 4 Km. S. of junction with Rio Chinchina, Cordillera Central, Caldas, | Nov. 27, 1944. |
| 20871 Macrocnemum | 8 Km. up Rio Apía on first uplands, Caldas, | Nov. 29. |
| 20872 Cinchona pubescens (Bark sample) | "Cascarilla" Quebrada Farallona, Rio Apía, Cordillera Occidental, Caldas | Nov. 29, 1944 |
| 20873 Cinchona pubescens | "Cascarilla" (Bark sample) Cuchilla San Rafael, 3 Km. W. of Santuario, Cordillera Occidental, Caldas | Dec. 1, 1944. |
| 20874 Gesneriaceae | Cerro Churumbelo, 2nd. ridge N. of Quebrada Peñasblancas, S. W. of Santuario, Cerro Tztamá, Cordillera Occidental, Caldas | Dec. 3, 1944. |
| 20875 Orchidaceae | | |
| 20876 Orchidaceae | | |
| 20877 Gesneriaceae | | |
| 20878 Orchidaceae | | |
| 20879 Orhidaceae | | |
| 20880 Ericaceae | "Uvitas" | |
| 20881 Orchidaceae | | |
| 20882 Orchidaceae | | |
| 20883 Gesneriaceae | "Mancha de sangre" | |
| 20884 Orchidaceae | | |
| 20885 Begonia | near head of Rio Mapa, Cerro Tatamá, Cordillera Occidental | Dec. 4, 1944. |
| 20886 Orchidaceae | | |
| 20887 Gynandropsis | | |
| 20888 Acanthaceae | | |
| 20889 Carica | "Papayo" Rio Lejos, E. of Pijao, Cordiller Central | Dec. 10, 1944. |

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|---|---|---|---|
| 20890 | Vallea stipularis | "Raque" Rio Lejos, camino a Páramo de Chilí, Cordillera Central, Caldas | Dec. 10, 1944 |
| 20891 | Lycopodium | "Melena" | |
| 20892 | Vallea stipularis | "Manzano" Rio Azul, Páramo de Chilí, Cordillera Central | Dec. 11, 1944 |
| 20893 | Vallea stipularis | "Manzano" | |
| 20894 | Orchidaceae | La Vega, Rio Azul, Páramo de Chilí, Cordillera Central, Caldas | Dec. 11, 1944 |
| 20895 | Compositae | | Dec. 12, 1944. |
| 20896 | Compositae | "Cenizo" | |
| 20897 | Pedicularis | Rio Azul, Páramo de Chilí, Cordillera Central Caldas | Dec. 12, 1944. |
| 20898 | Espeletia | Páramo de Chilí, Quebrada El Oso, Cordillera Central, Tolima | Dec. 12, 1944 |
| 20899 | Compositae | | |
| 20900 | Centropogon | | |